

# Kentucky Occupational Outlook to 2012

Cashiers ~ Special Education Teachers ~ Food Service  
Managers ~ Child Care Workers ~ Electrical Engineers ~  
Printing Machine Operators ~ Electricians ~ Bartenders ~  
Loan Officers ~ Registered Nurses ~ Hazardous  
Materials Removal Workers ~ Pharmacists ~  
Hotel, Motel, and Restaurant Managers ~  
Librarians ~  
Computer ~  
Interior ~  
Bailiffs ~  
Specialists ~ Carpenters ~ Bakers ~ Bus Drivers ~ Airline  
Pilots ~ Bookbinders ~ Roofers ~ Postal Service Clerks



## Education Cabinet

Department for Workforce Investment  
Office of Employment and Training  
Frankfort, Kentucky 40621

# **KENTUCKY OCCUPATIONAL OUTLOOK TO 2012**

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## Preface

Which jobs will be in demand in Kentucky from now until 2012? Which occupations will provide the most job openings each year through 2012? Which occupations are likely to grow the fastest between 2002 and 2012? Which are likely to decline? This report offers some insight into these often asked questions. Students, job seekers, counselors, and others should find this report helpful.

The Labor Market Information in this publication is based on a large array of labor market statistics collected and developed by the staff of the Research and Statistics (R&S) Branch in the Kentucky Office of Employment and Training. The Labor Market Information (LMI) Section within the Research and Statistics Branch developed the projections and this publication.

The estimates in this report reflect only the demand for labor from 2002 through 2012. The supply or the number of educated/trained workers to fill future job openings is beyond the scope of this report.

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## Highlights

- The Kentucky economy is expected to average over 76,000 new jobs annually between 2002 and 2012.
- The shifting structure of the Kentucky economy will continue down its long-term path.
- Nearly a fifth of the new jobs created between 2002 and 2012 will be in two of the largest occupational groups—Office and Administrative Support Occupations and Sales and Related Occupations.
- Personal Care and Service Occupations is by far the fastest growing group at 33.8 percent as a group—close behind is Education, Training, and Library Occupations at 31.8 percent and Computer and Mathematical Occupations at 31.4 percent.
- Health Support Occupations are projected to grow a very fast 28.8 percent because of the need to care for aging Kentuckians due to a longer life expectancy.
- Life, Physical and Social Science Occupations are expected to grow just above the growth rate for all occupations at 17.2 percent.
- Office and Administrative Support Occupations are expected to grow slowly at 9.2 percent between 2002 and 2012.
- Farming, Fishing, and Forestry Occupations will grow slightly overall with a little over 1,300 new jobs total over the 2002 to 2012 period.
- Installation, Maintenance, and Repair Occupations are expected to grow at 15.3 percent between 2002 and 2012, which is considered a steady growth rate.
- There are significant monetary payoffs for attending a postsecondary school, and an even greater monetary payoff for completing a postsecondary degree.

## Highlights (continued)

- Occupations requiring more education are increasing in share of total employment between 2002 and 2012.
- Low pay is given for jobs requiring only short-term, on-the-job training. Pay is significantly higher for jobs requiring long-term on-the-job training, but this category is projected to grow the slowest among all categories at 10.7 percent between 2002 and 2012.
- Occupations requiring moderate-term on-the-job training provide the best opportunities for persons not considering college, with an annual growth rate of 12.7 percent. They also have an average annual wage of approximately \$29,000, and over three times as many annual job openings as those occupations requiring long-term training.
- Occupations usually requiring a doctoral degree are expected to grow the fastest of all education/training groups between 2002 and 2012.
- For persons considering college, a bachelor's degree provides the largest number of job opportunities.
- Occupations that require a master's degree are expected to grow 27 percent as a group between 2002 and 2012, the second highest among all groups.
- The occupations generally requiring a first professional degree primarily lie in the field of Healthcare Practitioners and Technical Occupations. Lawyers, Law Teachers (Postsecondary) and Clergy are the three exceptions.
- Employment for Education, Training, and Library Occupations has gone down recently, however over the period of 2002 to 2012 employment should pick up and grow overall at a rate of 31.8 percent.
- Occupations requiring short-term on-the-job training account for almost one-third of the total average annual job openings.
- Changes in technology, work processes, automation and the demand for products/services are among the major causes of projected employment change - both growth and decline - among occupations.

## A User's Guide to Occupational Outlook Statistics

*When looking at an occupation, what key outlook data should you review?*

- 1) **Annual Job Openings** (2002-2012) The annual openings estimate the likely annual demand for workers in each occupation.
- 2) **Job Growth Rate** (2002-2012) The job growth rate shows the percentage each occupation is likely to grow or decline between 2002 and 2012.

*What creates job openings?*

- 1) **Employment growth** (new jobs).
- 2) **Employment separations** (job vacancies created by persons leaving an occupation). The **employment separation number** for an occupation is the rate at which workers leave that occupation.

*What creates employment change?*

- 1) **Industry growth or decline** has the greatest influence on employment change. Industry growth occurs when the demand for goods and services rises and, in turn, the demand for workers to produce those goods and services also rises.
- 2) **Technological change** can raise the demand for some skills while eliminating the need for other skills. As this shift progresses, demand in the industry as a whole may be rising or falling.
- 3) **New ways of doing business** such as self-service, 24-hour operations, etc., can affect employment change.

*Do workers leave some occupations more than other occupations?*

**Yes.** Every occupation has a different employment separation number. Occupations requiring more education and training have a higher percentage of full-time workers and lower separation numbers. Occupations requiring less education tend to have higher separation numbers.

*What factors affect the number of jobs openings for an occupation?*

- 1) **The overall size of the occupation** - how many workers are employed now?
- 2) **The occupation's separation number** - how many job vacancies are created from workers leaving the occupation?
- 3) **The occupation's rate of change** - how fast is the occupation growing or declining?

*Which factors are most important?*

The **overall employment** size and the number of separations are more important than the percent change in affecting the number of job openings.

*Which is the best way to compare one occupation with another?*

- 1) Look at the total **Average Annual Job Openings** not just openings resulting from growth. A large number of openings means it should be relatively easy to find a job in that occupation.
- 2) Look at the **Job Growth Rate** (2002-2012) expressed as a percentage. A high percentage increase in employment means there should be more chances for advancement and earning increases because demand is likely to remain strong for some time.

## Kentucky Occupational Outlook to 2012

The future is never certain, but it can be very useful to look ahead and try to determine the likely employment outlook for the Kentucky economy through the year 2012. Labor market conditions in Kentucky are becoming more favorable for employment than they have been in recent years, and the long-term job outlook projects a continuation of that trend.

### ***The Kentucky economy will generate over 76,000 jobs annually.***

The Kentucky economy is expected to increase by over 316,000 new jobs from 2002 through 2012. An additional 445,000 job vacancies will likely occur as workers leave or separate from various occupations in Kentucky. Such job vacancies become available from retirements, promotions, or transfers within occupations. This means the Kentucky economy will generate over 76,000 jobs per year through 2012 to be filled by educated and trained workers.

### ***The shifting structure of the Kentucky economy will continue.***

The 2002 to 2012 employment outlook will vary greatly among the specific occupations presented in the Kentucky Occupational Outlook and Job Openings table on pages 27-63. However, the structure of the major occupational divisions will shift moderately from 2002 through 2012 (see Chart 1, page 5).

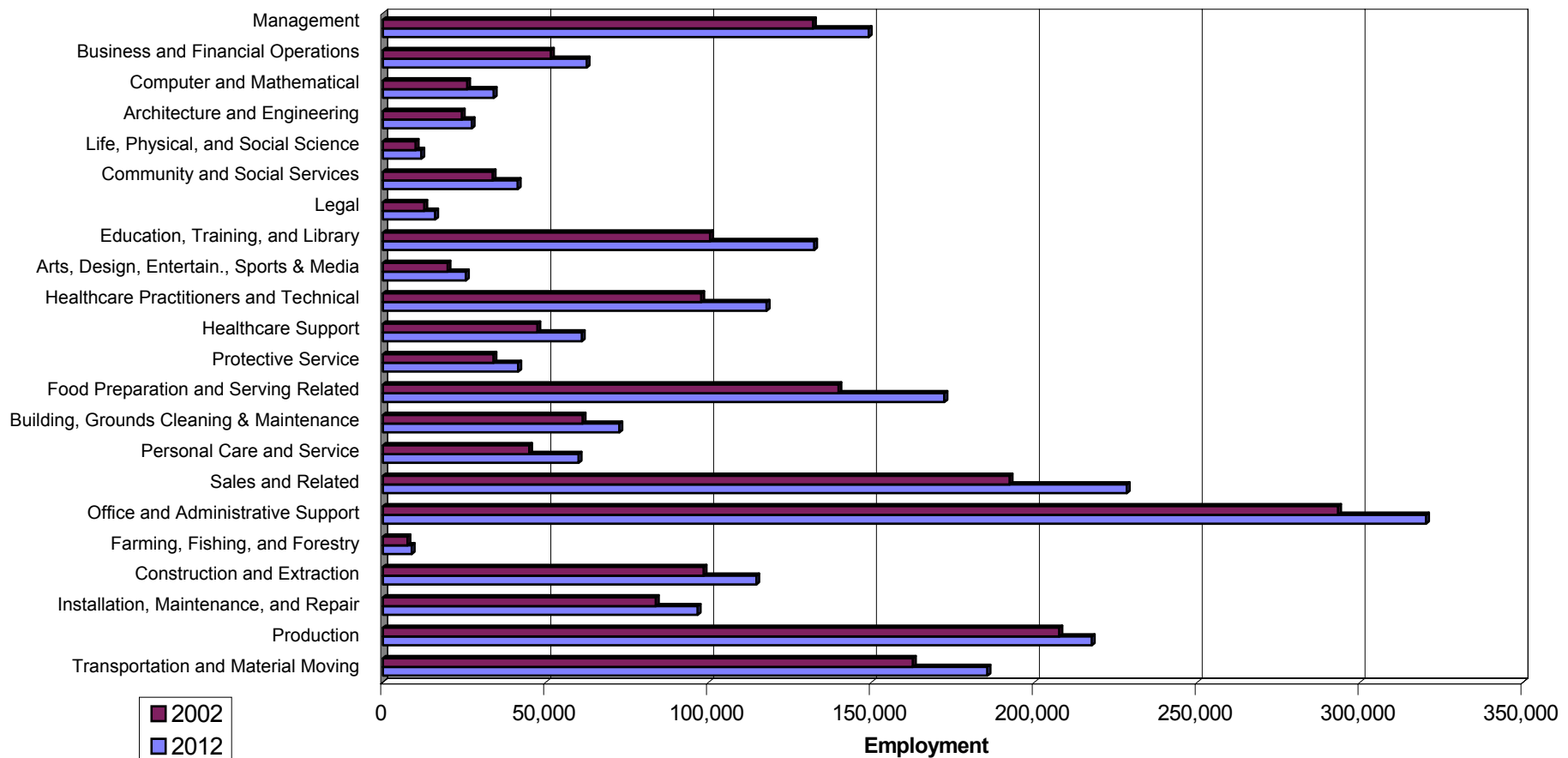
### ***Nearly one-third of the new jobs created between 2002 and 2012 will be in three very large occupational groups.***

Employment in three major occupational groups - Sales and Related Occupations, Food Preparation and Serving Related Occupations, and Education, Training, and Library Occupations - will grow 18.7, 23.3, and 31.8 percent, respectively, between 2002 and 2012, and will add the most jobs over the 10 year period (see Table 1, page 6). These three major groups, which are on opposite ends of the educational attainment spectrum, are expected to provide about 32 percent of the total job growth from 2002 to 2012.

### ***Personal Care and Service Occupations is by far the fastest growing group of occupations.***

Personal Care and Service Occupations are projected to grow between 2002 and 2012 at a fast pace - 33.8 percent - twice the average rate of growth for all occupations. Even though the overall growth of Computer and Mathematical Occupations has slowed over this 2002 to 2012 period, the single occupation with the fastest growth rate is Network Systems and Data Communications Analysts, projected to grow at the very fast rate of 61.9 percent over the 10 year period.



**CHART 1****Kentucky Employment by Major Occupational Category*****Health Service Occupations are projected to grow very fast .***

Among the Service Occupations, Healthcare Support Occupations are expected to grow a very fast 28.8 percent because of the need to care for aging Kentuckians due to their longer life expectancy. Massage Therapists and Medical Assistants are expected to increase by over 50 percent over the 10 year period.

***Educational, Training, & Library Occupations, Food Prep. & Serving Related Occupations, and Sales & Related Occupations will together comprise almost one-third of the projected total job openings over the 10 years.***

These three large groups of occupations will provide annual growth of approximately 32,000, 32,500, and 36,000 respectively. They are also projected to grow 31.8, 23.3, and 18.7 percent respectively. Along with Educational, Training, and Library Occupations, Computer and Mathematical Occupations and Personal Care and Service Occupations are projected to grow at more than 30 percent over the 10 year period.

**TABLE 1: Employment and Average Annual Job Openings, 2002-2012, by Occupational Categories**

Occupation		Employment				Change		Total Average Annual Job Openings by Occupation Category	
		Number		Percent Distribution		2002-2012		2002-2012	
Category	Code	2002	2012	2002	2012	Number	Percent	Number*	Percent Distribution
Total, All Occupations		1,881,897	2,197,908	100.0%	100.0%	316,011	16.8%	76,099	100.0%
Management Occupations	11	132,033	149,159	7.0%	6.8%	17,126	13.0%	3,788	5.0%
Business and Financial Operations Occupations	13	51,589	62,577	2.7%	2.8%	10,988	21.3%	2,048	2.7%
Computer and Mathematical Occupations	15	25,915	34,040	1.4%	1.5%	8,125	31.4%	1,157	1.5%
Architecture and Engineering Occupations	17	24,226	27,308	1.3%	1.2%	3,082	12.7%	867	1.1%
Life, Physical, and Social Science Occupations	19	10,081	11,814	0.5%	0.5%	1,733	17.2%	405	0.5%
Community and Social Services Occupations	21	33,727	41,421	1.8%	1.9%	7,694	22.8%	1,408	1.9%
Legal Occupations	23	12,757	16,066	0.7%	0.7%	3,309	25.9%	475	0.6%
Education, Training, and Library Occupations	25	100,464	132,414	5.3%	6.0%	31,950	31.8%	5,205	6.8%
Arts, Design, Entertain., Sports & Media Occupations	27	19,873	25,493	1.1%	1.2%	5,620	28.3%	947	1.2%
Healthcare Practitioners & Technical Occupations	29	97,739	117,817	5.2%	5.4%	20,078	20.5%	3,864	5.1%
Healthcare Support Occupations	31	47,446	61,095	2.5%	2.8%	13,649	28.8%	2,116	2.8%
Protective Service Occupations	33	33,974	41,570	1.8%	1.9%	7,596	22.4%	1,735	2.3%
Food Preparation and Serving Related Occupations	35	139,879	172,402	7.4%	7.8%	32,523	23.3%	8,658	11.4%
Building, Grounds Cleaning & Maintenance Occupations	37	61,345	72,629	3.3%	3.3%	11,284	18.4%	2,356	3.1%
Personal Care and Service Occupations	39	44,941	60,116	2.4%	2.7%	15,175	33.8%	2,631	3.5%
Sales and Related Occupations	41	192,413	228,364	10.2%	10.4%	35,951	18.7%	10,008	13.2%
Office and Administrative Support Occupations	43	293,258	320,242	15.6%	14.6%	26,984	9.2%	9,474	12.4%
Farming, Fishing, and Forestry Occupations	45	7,548	8,872	0.4%	0.4%	1,324	17.5%	328	0.4%
Construction and Extraction Occupations	47	98,485	114,653	5.2%	5.2%	16,168	16.4%	3,630	4.8%
Installation, Maintenance, and Repair Occupations	49	83,810	96,646	4.5%	4.4%	12,836	15.3%	3,135	4.1%
Production Occupations	51	207,662	217,604	11.0%	9.9%	9,942	4.8%	5,960	7.8%
Transportation and Material Moving Occupations	53	162,732	185,606	8.6%	8.4%	22,874	14.1%	5,905	7.8%

\* Includes growth (new jobs) plus separations.

***All major Occupational groups are expected to increase over the period 2002 to 2012.***

Office and Administrative Support Occupations, the largest employment group, is expected to grow a slow 9.2 percent between 2002 and 2012. Advances in technology and office procedures will slow growth in these occupations.

Production Occupations are expected to grow at a very slow rate of 4.8 percent between 2002 and 2012. Advances in technology are also the cause of the slow growth (and sometimes decline) in this occupational group.

## The Value of Education

Many factors go into determining one's success in the future workplace of Kentucky. However, education will continue to be one of the most critical factors in gaining employment in a chosen field. While there are many reasons other than money for selecting a career, traditionally, the more education you have the more money you can earn. In fact, the value of education has increased during the past 20 years. Table 2 below clearly shows the current general monetary value of education within the state.

***There are significant payoffs for attending any postsecondary school.***

From the data listed in Table 2, one can clearly see the benefits monetary of each level of achieved training and education. The smallest training category, which consists of all degrees higher than a bachelor's degree, earns by far the most on average. Those occupations that generally require a bachelor's degree or a bachelor's degree with work experience earn markedly less than those requiring a postgraduate degree, but they still earn a great deal more on average than those occupations that normally require an associate's degree or postsecondary vocational training.

It is important to note that the category consisting of occupations generally requiring an associate's degree or postsecondary vocational training can be somewhat misleading statistically. This group, when combined, earns less on average than the category consisting of occupations generally requiring work experience in a related occupation or long-term, on-the-job training. This does not necessarily imply that there is no benefit in attaining an associate's degree. Occupations requiring an associate's degree account for a little less than half of the some 146,000 persons employed in this category with an average annual wage of over \$37,000; occupations requiring postsecondary vocational training make up the rest with an average annual wage of about \$33,000.

The bulk of Kentucky's workforce continues to reside in those occupations requiring either moderate-term or short-term on-the-job training. These categories, when combined, account for over half of the state's total employment. This reflects the Kentucky economy's persistent reliance on manufacturing and services in recent years. With technology expanding throughout the workforce; however, many of these occupations will require additional skills and training in the future.

**TABLE 2: 2003 Average Annual Kentucky Wage Estimates by Training Category**

<b>Training Category</b>	<b>Training Code</b>	<b>Total Employment</b>	<b>Average Annual Wage</b>
Postgraduate	1,2,3	62,727	\$67,883
Bachelor's Degree & Bachelor's Degree with Work Experience	4,5	260,542	\$53,328
Associate's Degree or Postsecondary Vocational Training	6,7	146,255	\$34,972
Work Experience in a Related Occupation or Long-Term OJT	8,9	284,675	\$37,028
Moderate-Term OJT	10	445,276	\$28,954
Short-Term OJT	11	682,404	\$22,738

## Education and Training

This section of the report groups Kentucky occupations by levels of education and training generally required to gain employment in a chosen field. The Bureau of Labor Statistics developed 11 broad education and training levels to present the occupations for analysis. The 11 categories are grouped as follows:

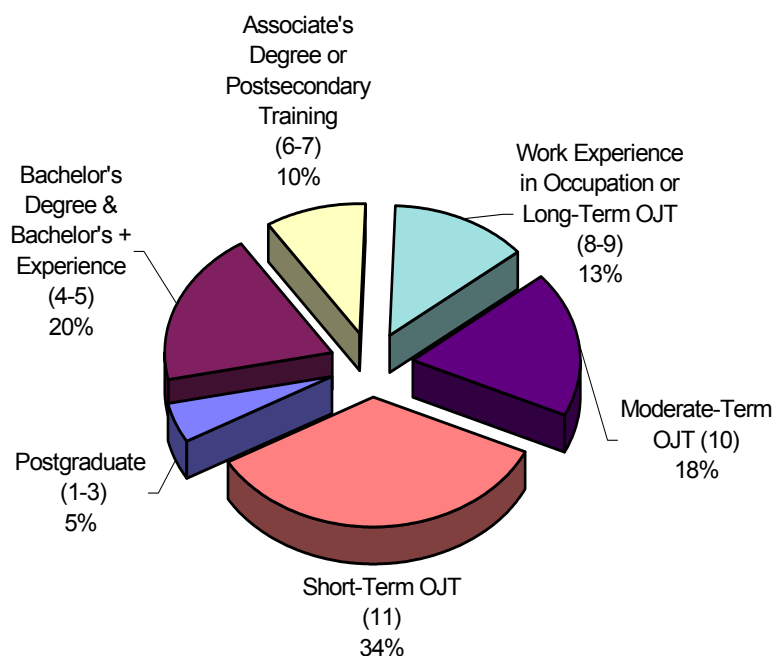
- (1) Professional degree, (such as physicians, lawyers, clergy, etc.)
- (2) Doctoral degree,
- (3) Master's degree,
- (4) Bachelor's degree plus work experience,
- (5) Bachelor's degree,
- (6) Associate degree,
- (7) Postsecondary vocational training,
- (8) Work experience in a related occupation,
- (9) Long-term, on-the-job training,
- (10) Moderate-term, on-the-job training, and
- (11) Short-term, on-the-job training.

The percentage of new jobs the Kentucky economy is likely to create between 2002 and 2012 are displayed in Chart 2. Categories 1, 2 and 3 are combined as "Postgraduate," categories 4 and 5 are combined as "Bachelor's degree and Bachelor's degree with Work Experience"; categories 6 and 7 are combined as "Associate's Degree or Postsecondary Training"; and categories 8 and 9 are combined as "Work Experience in a Related Occupation or Long-Term OJT". The remaining categories are shown individually. The largest education and training category, short-term

OJT, with over 682,000 workers in 2002, is projected to account for 34 percent of the new job openings between 2002 and 2012. The category consisting of bachelor's degree and bachelor's degree with experience accounted for 13.8 percent of all Kentucky workers in 2002 and is projected to account for 20 percent of new job growth. About 3.3 percent of workers are employed in occupations that generally require more education than a bachelor's degree, but this number is projected to account for about 5 percent of new job growth by 2012.

**CHART 2**

**Percent of Total Kentucky Job Growth  
by Education or Training 2002-2012**



***Occupations requiring more education are increasing in share of employment.***

Occupations requiring an associate's degree or more education will increase in the share of total employment.

Occupations requiring just a high school diploma and work experience will decline overall in share of employment.

Occupations requiring an associate's degree or more education accounted for 21 percent of all Kentucky's jobs in 2002 and will account for over 22 percent of projected employment for 2012. In contrast, occupations requiring no education or training beyond high school are declining in share of employment over the period.

***Low pay is given for jobs requiring only short-term, on-the-job training.***

The largest group of occupations consists of those requiring short-term, on-the-job training meaning workers generally learn the required job skills in a few weeks or less. In 2002, approximately 682,000 Kentucky workers in these occupations accounted for over 36 percent of the state's total employment. Most occupations in this category are Office and Administrative Support Occupations, Production Occupations, and Transportation and Material Moving Occupations. Over half of the workers in these occupations earn \$10 or less an hour.

<b>TABLE 3: Employment and Average Annual Job Openings, 2002-2012, by Education and Training Categories</b>									
<b>Education and Training</b>		<b>Employment</b>				<b>Change</b>		<b>Total Average Annual Job Openings by Occupation Category</b>	
		Number		Percent Distribution		2002-2012		2002-2012	
Category	Code	2002	2012	2002	2012	Number	Percent	Number	Percent Distribution
Total, All Occupations		1,881,897	2,197,908	100.0%	100.0%	316,011	16.8%	31,601	100.0%
First Professional Degree	1	30,346	37,316	1.6%	1.7%	6,970	23.0%	697	2.2%
Doctoral Degree	2	9,453	12,389	0.5%	0.6%	2,936	31.1%	294	0.9%
Master's Degree	3	22,928	29,089	1.2%	1.3%	6,161	26.9%	616	1.9%
Work experience plus Bachelor's or higher degree	4	80,342	97,312	4.3%	4.4%	16,970	21.1%	1,697	5.4%
Bachelor's Degree	5	180,200	226,666	9.6%	10.3%	46,466	25.8%	4,647	14.7%
Associate's Degree	6	71,028	85,655	3.8%	3.9%	14,627	20.6%	1,463	4.6%
Postsecondary Vocational Training	7	75,227	91,073	4.0%	4.1%	15,846	21.1%	1,585	5.0%
Work experience in a related occupation	8	142,646	169,636	7.6%	7.7%	26,990	18.9%	2,699	8.5%
Long-term on-the-job training	9	142,029	157,188	7.5%	7.2%	15,159	10.7%	1,516	4.8%
Moderate-term on-the-job training	10	445,276	501,709	23.7%	22.8%	56,433	12.7%	5,643	17.9%
Short-term on-the-job training	11	682,404	789,852	36.3%	35.9%	107,448	15.7%	10,745	34.0%

***Pay is significantly higher for jobs requiring moderate-term, on-the-job training.***

Occupations requiring moderate-term, on-the-job training means workers can generally learn the job skill after one to 12 months of combined on-the-job experience and informal training. These occupations include about 445,000 workers or 23.7 percent of Kentucky's total employment in 2002. These moderate-term occupations are projected to increase by over 56,000 jobs by 2012. These workers will earn significantly more than workers in the lowest training category. Actually, over 90 percent of the workers in the moderate-term, on-the-job training category will earn more than \$10 per hour.

***Occupations requiring more than a year of on-the-job experience and formal training provide the best opportunities for persons not considering college.***

Occupations generally requiring more than a year of on-the-job experience and formal training - such as carpenters, police officers or maintenance repairers - account for 7.5 percent of Kentucky's total employment in 2002. Approximately 93 percent of employees in these occupations requiring more than a year of on-the-job experience earn more than \$10 per hour. An additional 7.6 percent are employed in occupations requiring experience from another occupation and generally do not require postsecondary education or training. Many of these workers are supervisors or managers and only one occupation in this group earns, on average, less than \$10 per hour. Occupations requiring post-secondary vocational training account for an additional 75,000 or 4 percent of total employment in 2002. Only two occupations listed in this category earn less than \$10 an hour.

***Occupations usually requiring a doctoral degree are expected to grow the fastest of all education/training groups between 2002 and 2012.***

Occupations usually requiring a doctoral degree accounted for only 0.5 percent of all jobs in 2002 and are expected to increase 31.1 percent by 2012 - the fastest growing category of all the education/training categories. Almost all of these occupations are in the Education, Training, and Library Occupations under the subheading of Postsecondary Teachers. This growth also emphasized the desire more people have to gain a postsecondary degree and as a result more qualified teachers are needed to educate the growing number of students.

***For persons considering college, a bachelor's degree provides the largest number of job opportunities.***

Occupations requiring a bachelor's degree accounted for 9.6 percent of all workers in 2002. These occupations are expected to increase to 10.3 percent by 2012. Employment in this category approximated 180,000 in 2002 and is projected to increase by over 46,000 workers by 2012. In addition, jobs in which workers needed experience before getting their current job accounted for another 4.3 percent of all workers in 2002. Many employees in this category work in Business and Financial Operations Occupations and Architecture and Engineering Occupations. All but one of these occupations generally requiring a bachelor's degree earn more than \$10 an hour and most earn substantially more than \$10 per hour.

***Occupations requiring education beyond a bachelor's degree should grow 25.6 percent between 2002 and 2012***

A relatively small proportion of workers are employed in occupations requiring education beyond a bachelor's degree, including occupations requiring a professional degree (1.6 percent), doctoral degree (0.5 percent) and master's degree (1.2 percent). Combined, these higher education categories are projected to grow by over 16,000 jobs between 2002 and 2012.

## **Charting the Occupational Outlook**

The following 14 charts focus on the occupations in Kentucky with the most annual job openings, fastest-growing employment and significant employment decline from 2002 to 2012. Each chart ranks the top 20 occupations, from highest to lowest, according to the number of annual job openings or percentage of change between 2002 and 2012. Each chart includes the 2003 Average Hourly Wage for each occupation. In addition, comments beside the chart summarize the occupational openings and job growth including factors that affect these changes.

The first 12 charts organize occupations by the levels of education and training usually required for one to obtain employment.

Charts 3 and 4 present Kentucky occupations usually requiring a professional or a graduate degree. First professional degrees, doctoral degrees, and master's degrees are grouped together in the "Graduate or Professional Degree" category.

Charts 5 and 6 display Kentucky occupations usually requiring a bachelor's degree or work experience in addition to a bachelor's degree.

Charts 7 and 8 rank the occupations generally requiring an associate's degree or post-secondary vocational certificate.

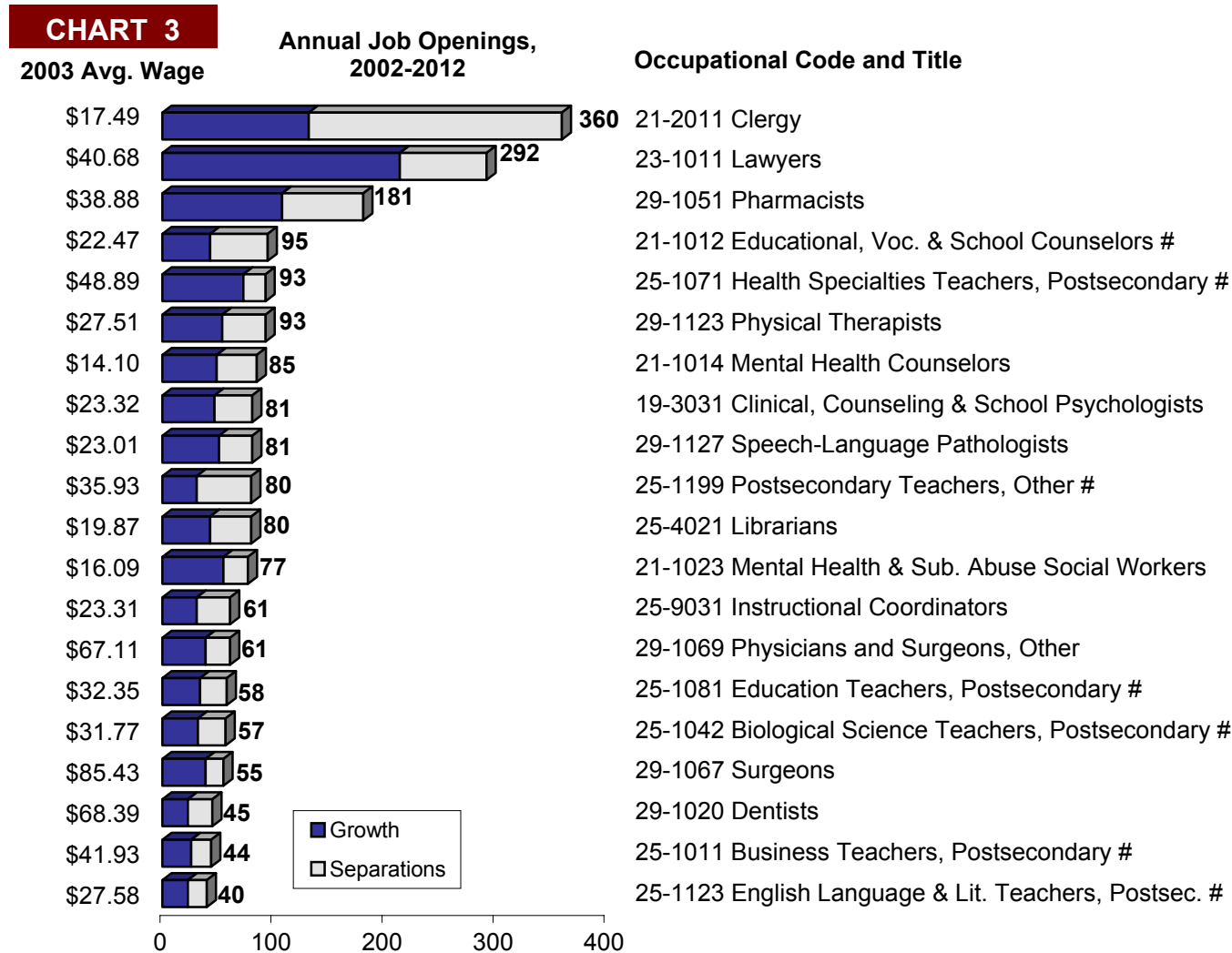
Charts 9 and 10 present the Kentucky occupations generally requiring long-term, on-the-job training or work experience in a related occupation.

Charts 11 and 12 display occupations requiring moderate-term, on-the-job training.

Kentucky occupations requiring short-term, on-the-job training are presented in Charts 13 and 14.

The last two charts, Charts 15 and 16, identify Kentucky occupations in which employment is expected to decline significantly between 2002 and 2012.

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring a Graduate or Professional Degree\*



*These 20 occupations represent almost 75 percent of the annual job openings among occupations requiring a graduate or professional degree. Educational, Vocational, and School Counselors are included in this category.*

*The top three occupations generally require a professional degree and provide 30 percent of the annual job openings in the category.*

*Eight of these 20 occupations are Education, Training, and Library Occupations. With 372 positions annually, Postsecondary Teachers provides the second most job openings among the major categories in this educational/training classification.*

*Another six of these are Healthcare Practitioners and Technical Occupations. Of these six, Surgeons earn the third-highest average hourly wage in the state of Kentucky, at about \$85 per hour.*

\* Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person needs a professional degree, master's degree, or doctoral degree to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation. The projected number of job openings each year is posted to the right of each bar.

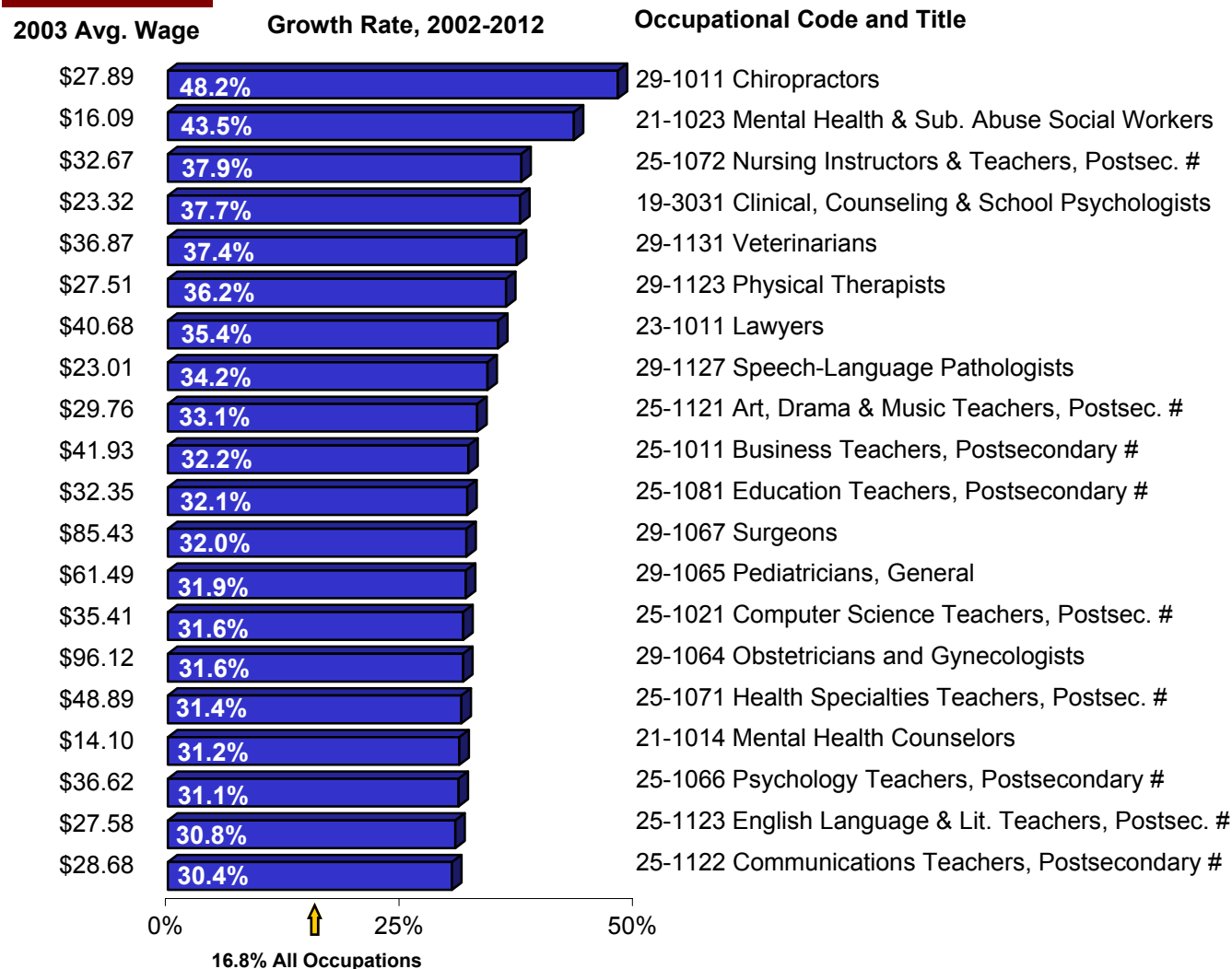
# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Twenty Fastest-Growing Kentucky Occupations Generally Requiring a Graduate or Professional Degree\*

**CHART 4**



*Occupations that require a graduate or professional degree are expected to grow 25.6 percent as a group between 2002 and 2012, the highest among all groups.*

*Chiropractors top the list as the occupation with the fastest growth rate at almost three times the average rate for all Kentucky occupations.*

*Nine of these 20 occupations are in health-related fields. Eight are postsecondary teachers, with Nursing Instructors and Teachers experiencing the highest job growth rate at about 38 percent.*

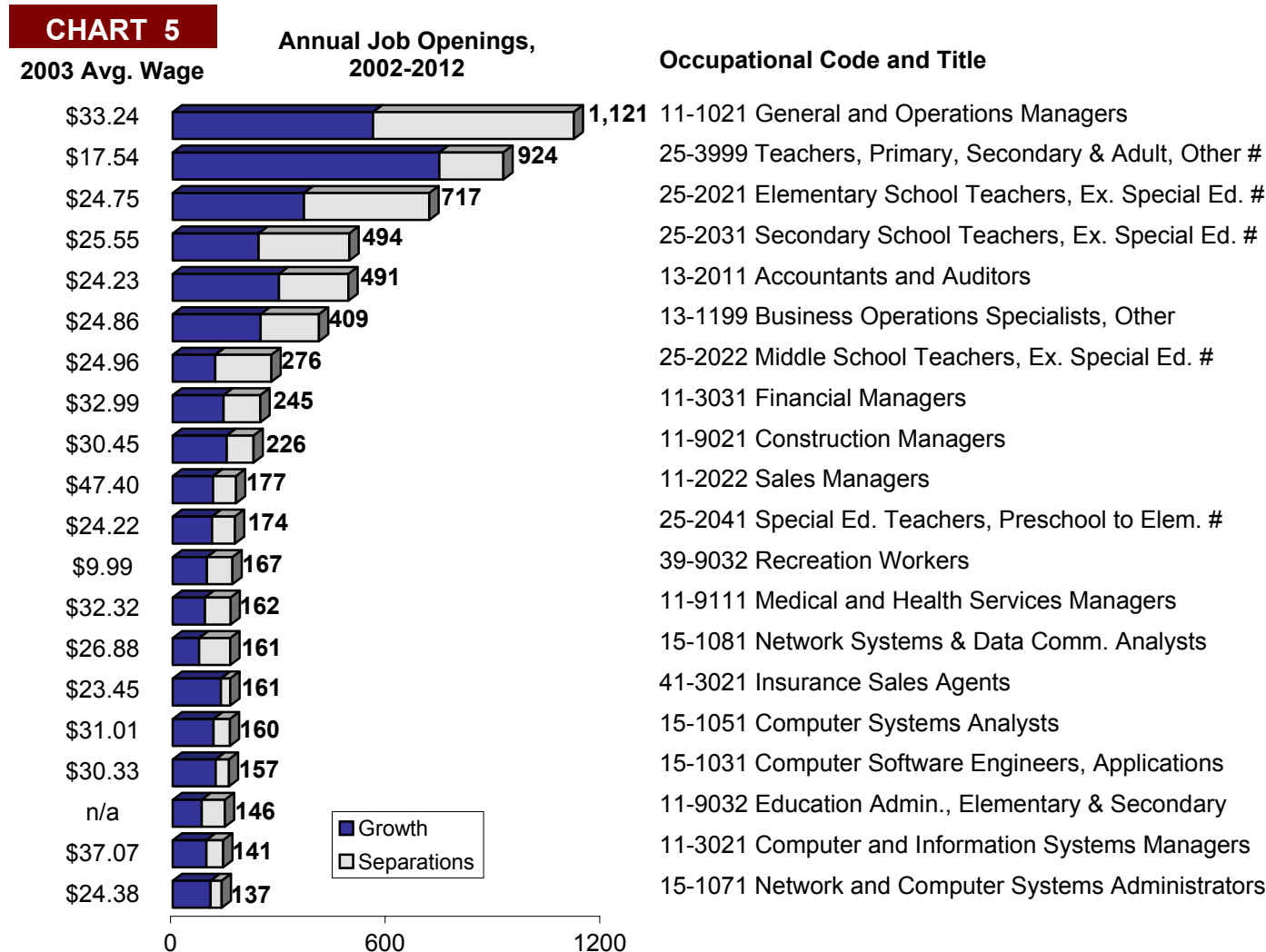
*Health-related occupations will generally average a higher hourly wage than education-related occupations. Of the occupations listed here, for example, Surgeons will average over \$85 an hour while English Language & Literature Teachers will earn little over \$27 an hour.*

\* This chart groups occupations generally requiring a master's degree, a doctoral degree, or a professional degree. Occupations with less than 20 job openings per year are not included in this chart.

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring a Bachelor's Degree or Bachelor's Degree and Work Experience\*



*These 20 occupations represent nearly 65 percent of annual job openings in all occupations that generally require a bachelor's degree. Six of these occupations also require work experience along with a bachelor's degree.*

*Occupations with the most job openings requiring this training include seven in management, five in the teaching profession and four in the computer field.*

*Accountants and Auditors and Business Operations Specialists, Other, both in the Business and Financial Operations Occupations, are projected to have 491 and 409 annual job openings, respectively, throughout Kentucky.*

*Recreation Workers and Insurance Sales Agents also made the list with 167 and 161 annual job openings throughout Kentucky.*

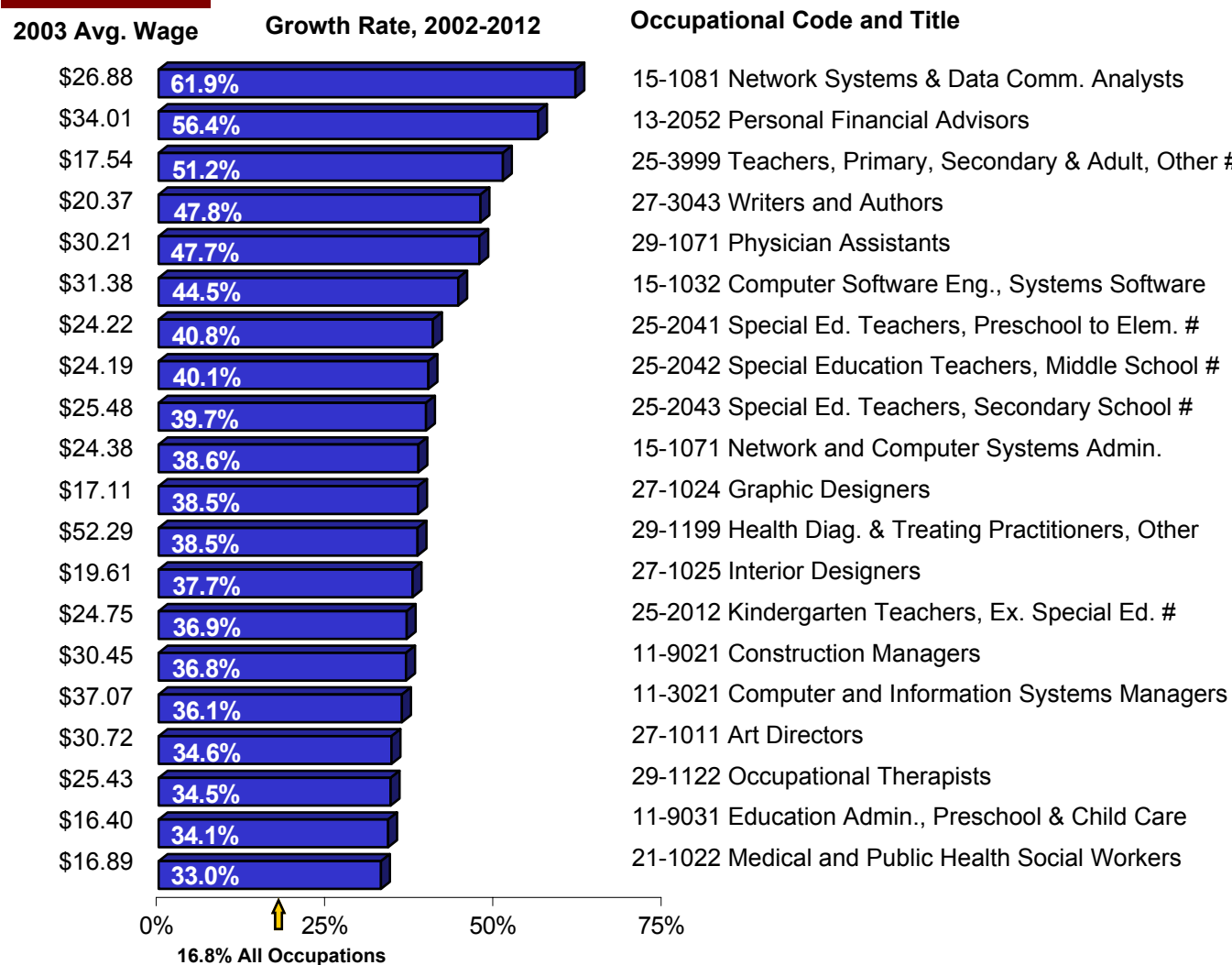
\* Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person needs a bachelor's degree or a bachelor's degree plus work experience to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation. The projected number of job openings each year is posted to the right of each bar.

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest-Growing Kentucky Occupations Generally Requiring a Bachelor's Degree or Bachelor's Degree and Work Experience\*

**CHART 6**



*Occupations that generally require a Bachelor's degree will grow an average of 25.8 percent between 2002 and 2012, significantly higher than the average for all occupations at 16.8 percent. Three of these occupations require work experience along with a Bachelor's degree.*

*Five of the 20 are Education, Training, and Library Occupations, while that group has had a recent decline in employment it is projected to grow from the period 2002 to 2012 at a rate of 31.8 percent.*

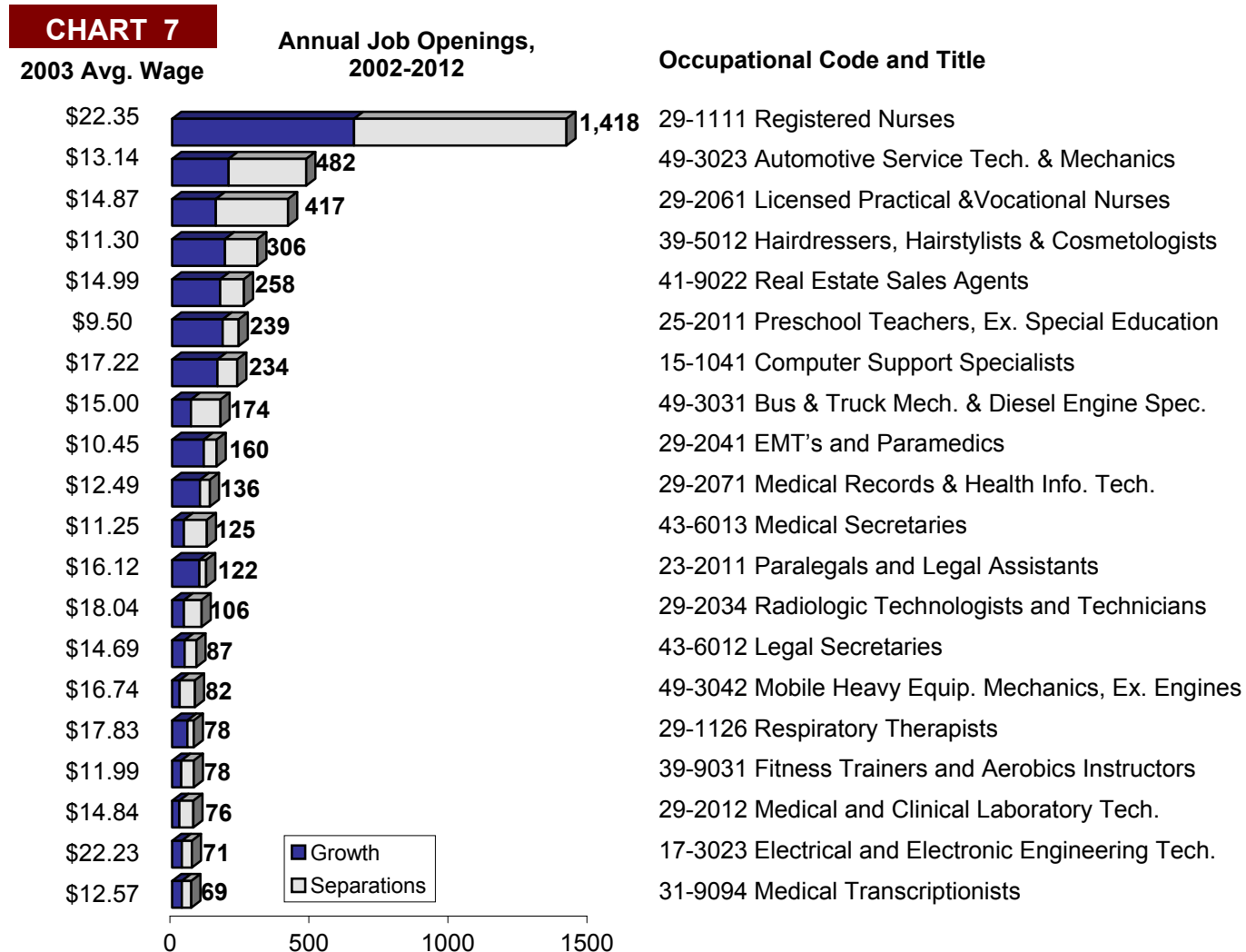
*Many different occupational groups, besides Education, Training, and Library Occupations, are represented in the top 20. Three are Management Occupations, three are Computer and Mathematical Occupations, and four are Art, Design, Entertainment, Sports & Media Occupations.*

\* This chart groups occupations generally requiring a bachelor's degree or a bachelor's degree plus work experience. Occupations with less than 20 job openings per year are not included in this chart.

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring an Associate's Degree or Postsecondary Vocational Training\*



*These 20 occupations represent over 80 percent of job openings that generally require an associate's degree or vocational technical training.*

*Seven of the 20 occupations are in medical fields, with Registered Nurses at the top by a large margin. Registered Nurses are expected to have almost three times as many annual job openings, some 1,418, as the second occupation, Automotive Service Technicians & Mechanics, with 482.*

*While most nurses currently get their training in associate's degree programs, a considerable number have obtained bachelor's degrees, which indicates that there is some overlapping of educational requirements among the group.*

\* Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person needs an associate's degree or postsecondary vocational training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation. The projected number of job openings each year is posted to the right of each bar.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest-Growing Kentucky Occupations Generally Requiring an Associate's Degree or Postsecondary Vocational Training\*

**CHART 8**



*Occupations that usually require an associate's degree are expected to grow at an average rate of 20.6 percent between 2002 and 2012.*

*Half of these 20 occupations require an associate's degree and half require vocational technical training. In addition, six of these 20 are in health-related fields.*

*Massage Therapists rank first among this group with a job growth rate of 61.1 percent between 2002 and 2012.*

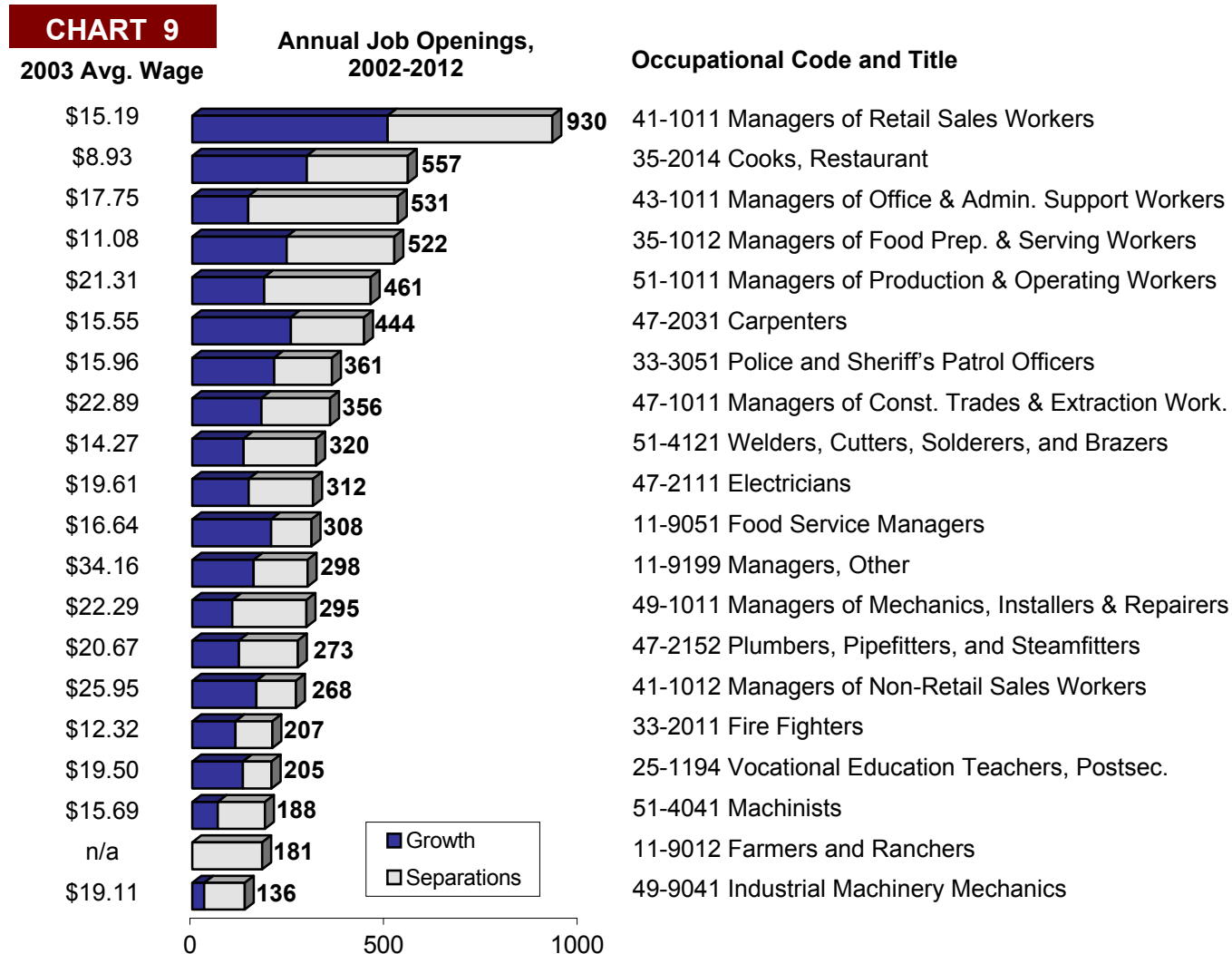
*These occupations account for nearly one-third of all occupations in Kentucky requiring an associate's degree or postsecondary vocational training.*

\* This chart groups occupations generally requiring an associate's degree or postsecondary vocational training. Occupations with less than 20 job openings per year are not included in this chart.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring Work Experience in a Related Occupation or Long-Term, On-The-Job Training\*



*Long-term, on-the-job training occupations generally require more than a year of experience and formal training.*

*Nine of the 20 occupations are either Construction and Extraction Occupations, Installation, Maintenance, and Repair Occupations, or Production Occupations. This shows how important construction and manufacturing still are to the Kentucky economy,*

*Four of the top five, five of the top 10, and eight of all 20 occupations listed are managers. These management positions are typically initial hires that have honed the skills of their occupation enough to oversee the new hires that follow them.*

\* Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person needs work experience in a related occupation or long-term, on-the-job training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation. The projected number of job openings each year is posted to the right of each bar.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest-Growing Kentucky Occupations Generally Requiring Work Experience in a Related Occupation or Long-Term, On-The-Job Training\*

**CHART 10**



*In this chart of occupations generally requiring long-term, on-the-job training, 12 require work experience in a related occupation as well.*

*Six of these 20 occupations are Protective Service Occupations. This is certainly a result of current national events that have raised the demand for more fire fighters, police officers, and private detectives in the nation, as well as in Kentucky.*

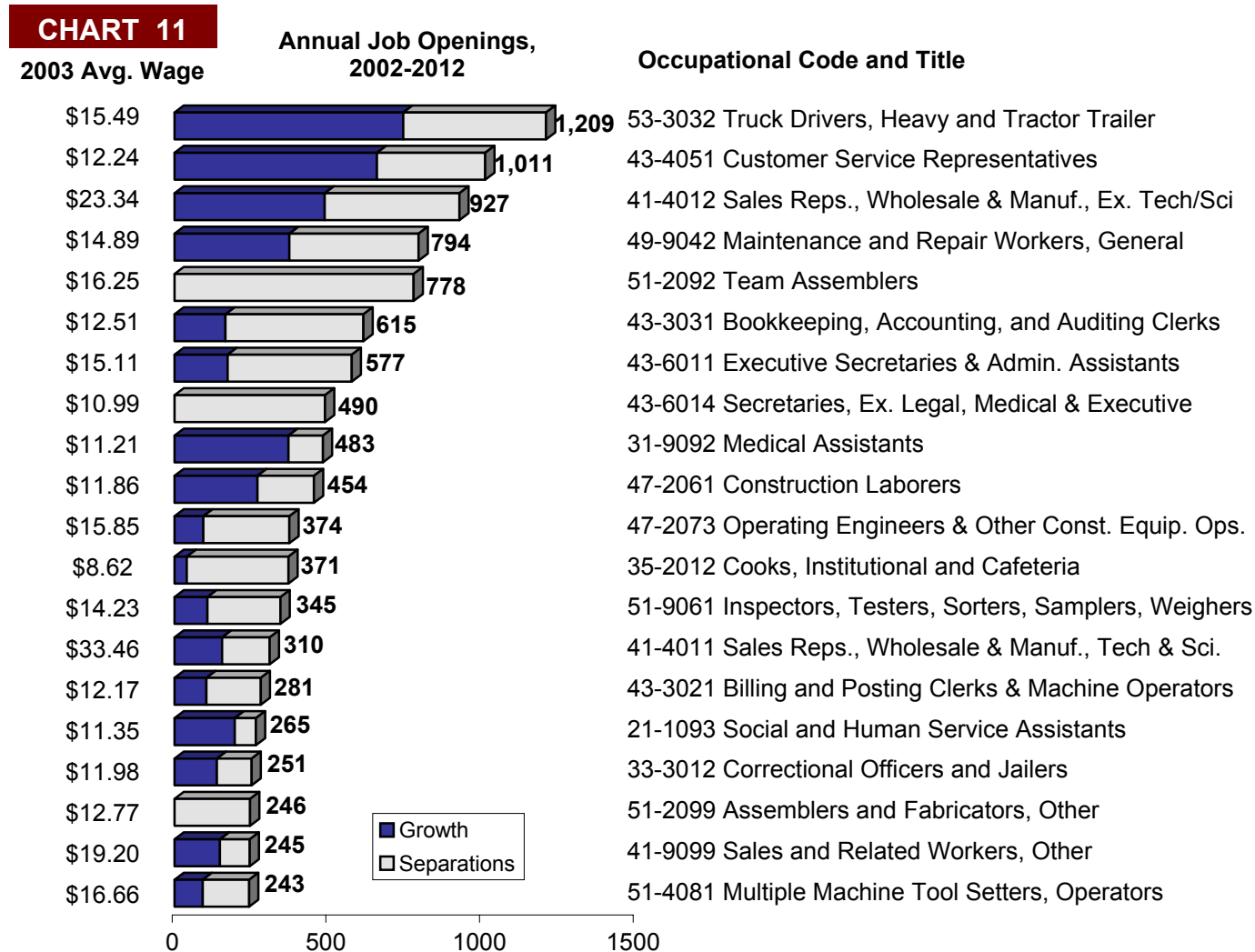
*Four of the top five are in Education, Training, and Library Occupations or Art, Design, Entertainment, Sports & Media Occupations.*

*Five on this chart of fastest-growing occupations requiring long-term, on-the-job training or work experience are also found within the top 20 annual job openings among this group of occupations.*

\* This chart groups occupations generally requiring work experience in a related occupation or long-term, on-the-job training. Occupations with less than 20 job openings per year are not included in this chart.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring Work Experience in a Related Occupation or Moderate-Term, On-The-Job Training\*



Workers in the occupations requiring moderate-term, on-the-job training generally learn their skills after one to 12 months of experience and informal training.

Of the 20 listed here, five are Office & Administrative Support Occupations, four are Production Occupations, and three are Sales & Related Occupations.

Even though, as a whole, Office & Administrative Support Occupations are only projected to grow a slow 9.2 percent, over the period of 2002 to 2012, several occupations will still have many annual openings due to a large number of separations.

Team Assemblers, Secretaries (ex. legal, medical & executive), and Assemblers & Fabricators, Other all have zero growth projected but still rank in the top due to the large number of separations.

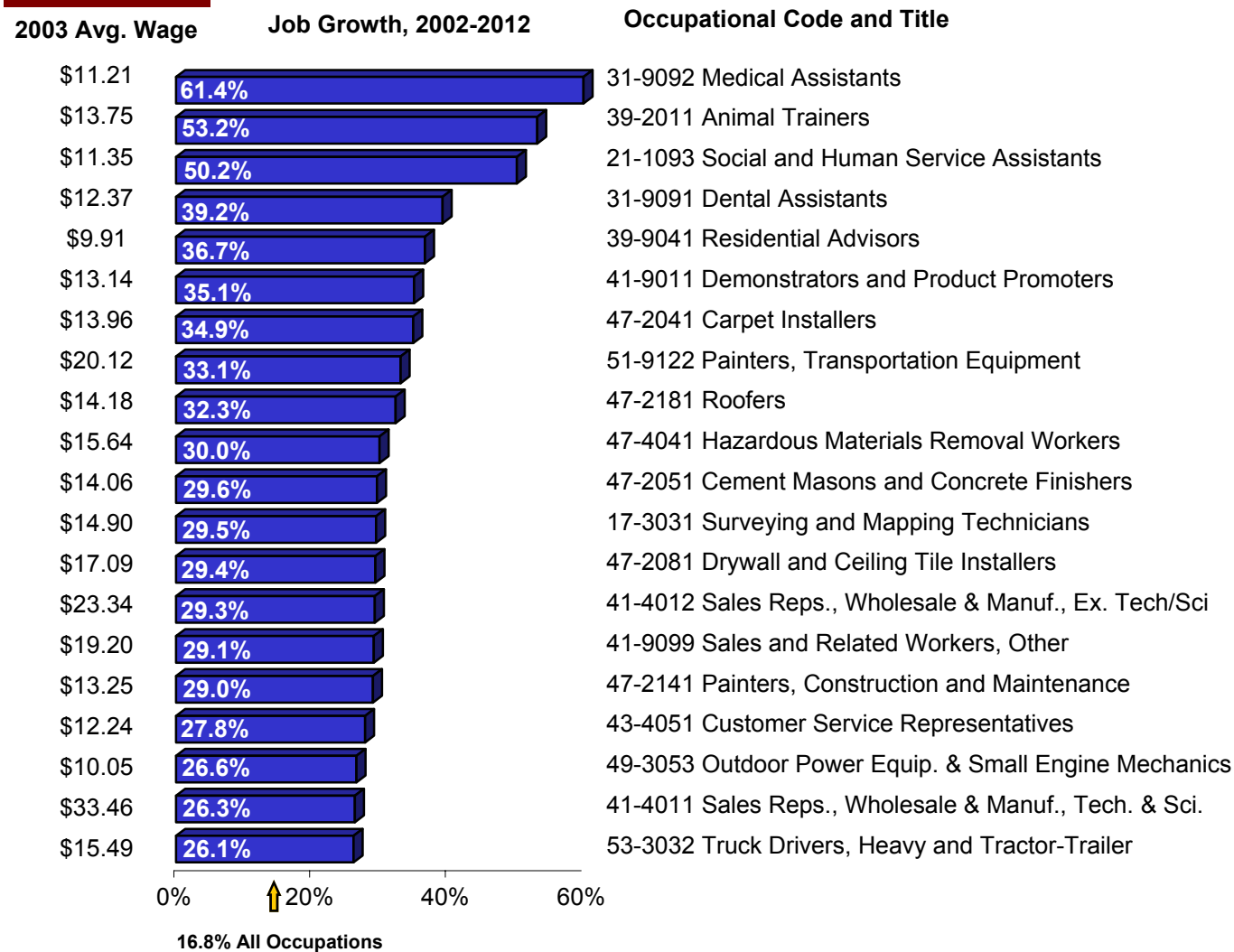
\* Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person needs work experience in a related occupation or moderate-term, on-the-job training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation. The projected number of job openings each year is posted to the right of each bar.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Twenty Fastest-Growing Kentucky Occupations Generally Requiring Work Experience in a Related Occupation or Moderate-Term, On-The-Job Training\*

**CHART 12**



*This group of occupations will grow the second-slowest in Kentucky at 12.7 percent between 2002 and 2012. By comparison, the average growth rate for all occupations in Kentucky is 16.8 percent.*

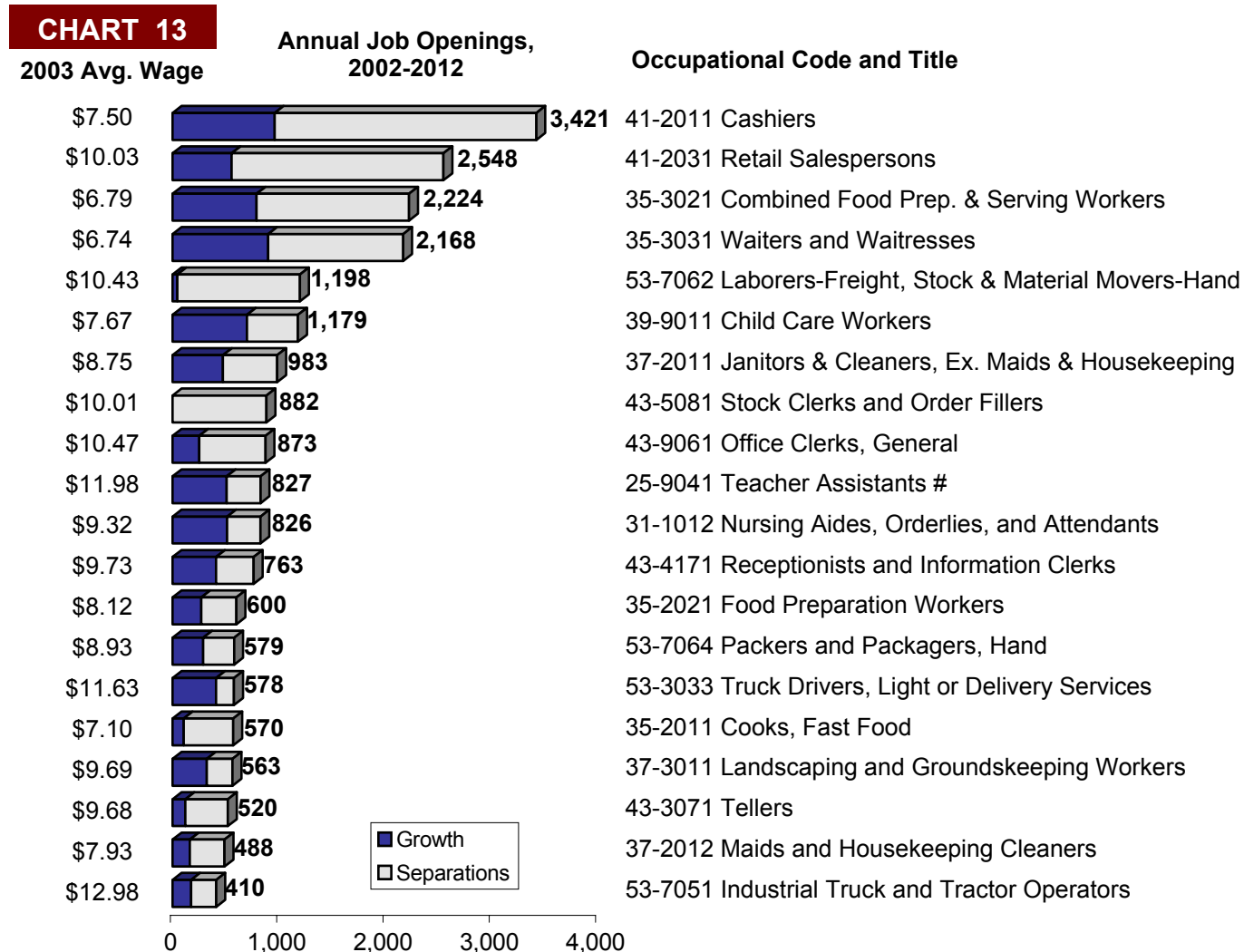
*The 20 occupations listed on this chart cover a fairly broad range of occupational categories. Six of the titles are Construction and Extraction Occupations and four are Sales and Related Occupations. Sales and Related Occupations have many occupations with a large number of annual openings as well as a fast job growth rate.*

*It is also evident that as the educational or training level continues to drop, so does the average annual hourly wage. Thirteen of the 20 occupations make, on average, less than \$15 per hour.*

\* This chart groups occupations generally requiring work experience in a related occupation or moderate-term, on-the-job training. Occupations with less than 20 job openings per year are not included in this chart.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations with the Most Annual Job Openings Generally Requiring Work Experience in a Related Occupation or Short-Term, On-The-Job Training\*



*Workers in occupations that require short-term, on-the-job training generally learn job skills in a few weeks or less.*

*Food Preparation and Serving Related Occupations, Office and Administrative Support Occupations, and Transportation and Material Moving Occupations all have four occupations each in the top 20.*

*Cashiers and Retail Salespersons, both in Sales and Related Occupations, will have the most annual openings in this group. Many of these openings come from the large number of separations those occupations see.*

*Most of these occupations are entry-level jobs from which persons with a high school diploma or more will move on to higher skilled/paying jobs.*

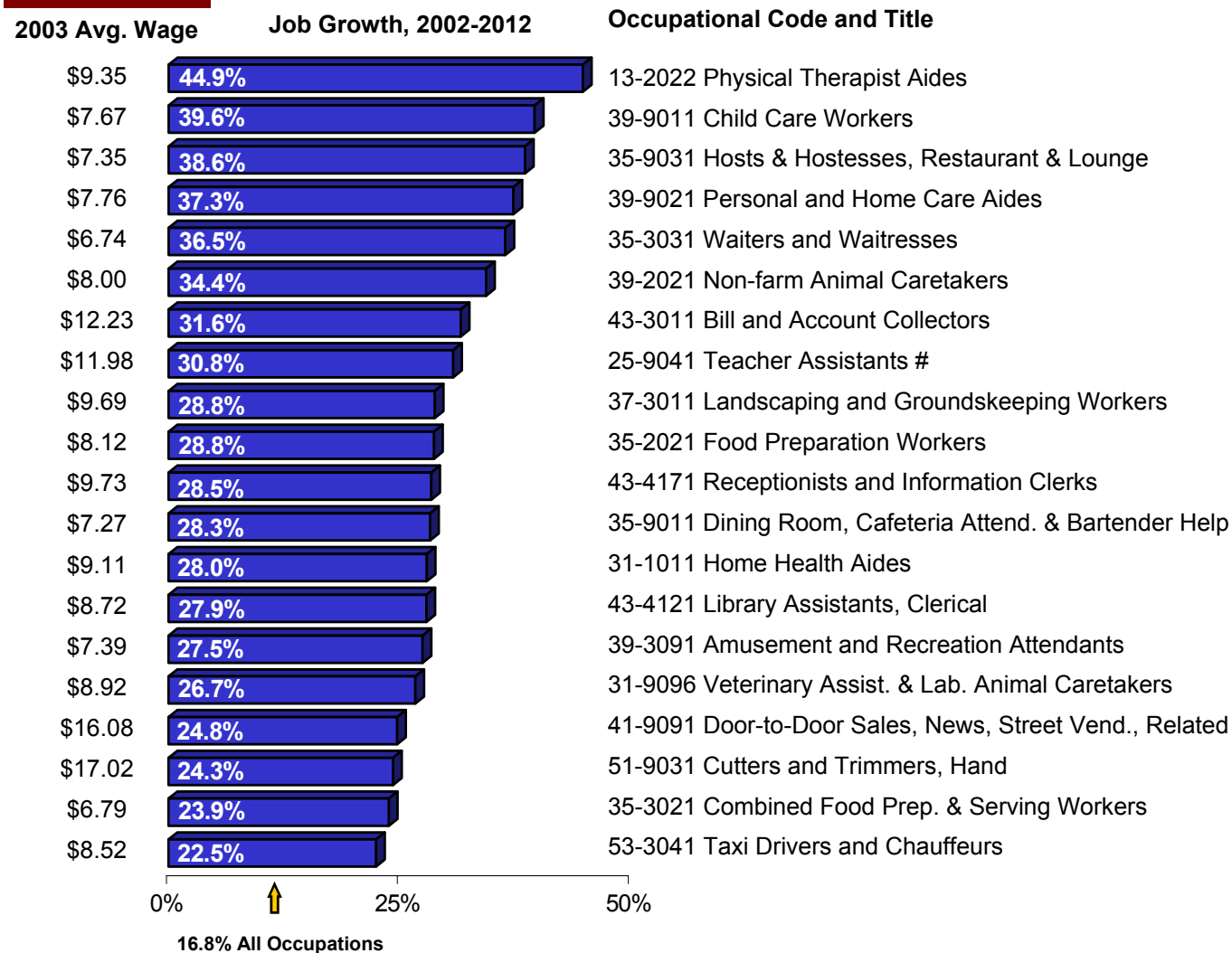
\* Ranked according to the total number of job openings each year, this chart illustrates the top 20 occupations in Kentucky for which a person needs work experience in a related occupation or short-term, on-the-job training to perform the duties. The dark bar represents the number of job openings due to employment growth. The light bar represents job openings due to workers separating from the occupation. The projected number of job openings each year is posted to the right of each bar.

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest-Growing Kentucky Occupations Generally Requiring Work Experience in a Related Occupation or Short-Term, On-The-Job Training\*

**CHART 14**



*Since these occupations require short-term, on-the-job training, employers prefer but often do not require a high school diploma. Because minimal training is required, many of these jobs are among the lowest paid occupations.*

*Five of these 20 occupations are Food Preparation and Serving Related Occupations, four are Personal Care and Service Occupations.*

*It is evident that many of the employees in these occupations will earn, on average, less than \$10 an hour. Only four of the 20 occupations will earn, on average, more than \$10 an hour.*

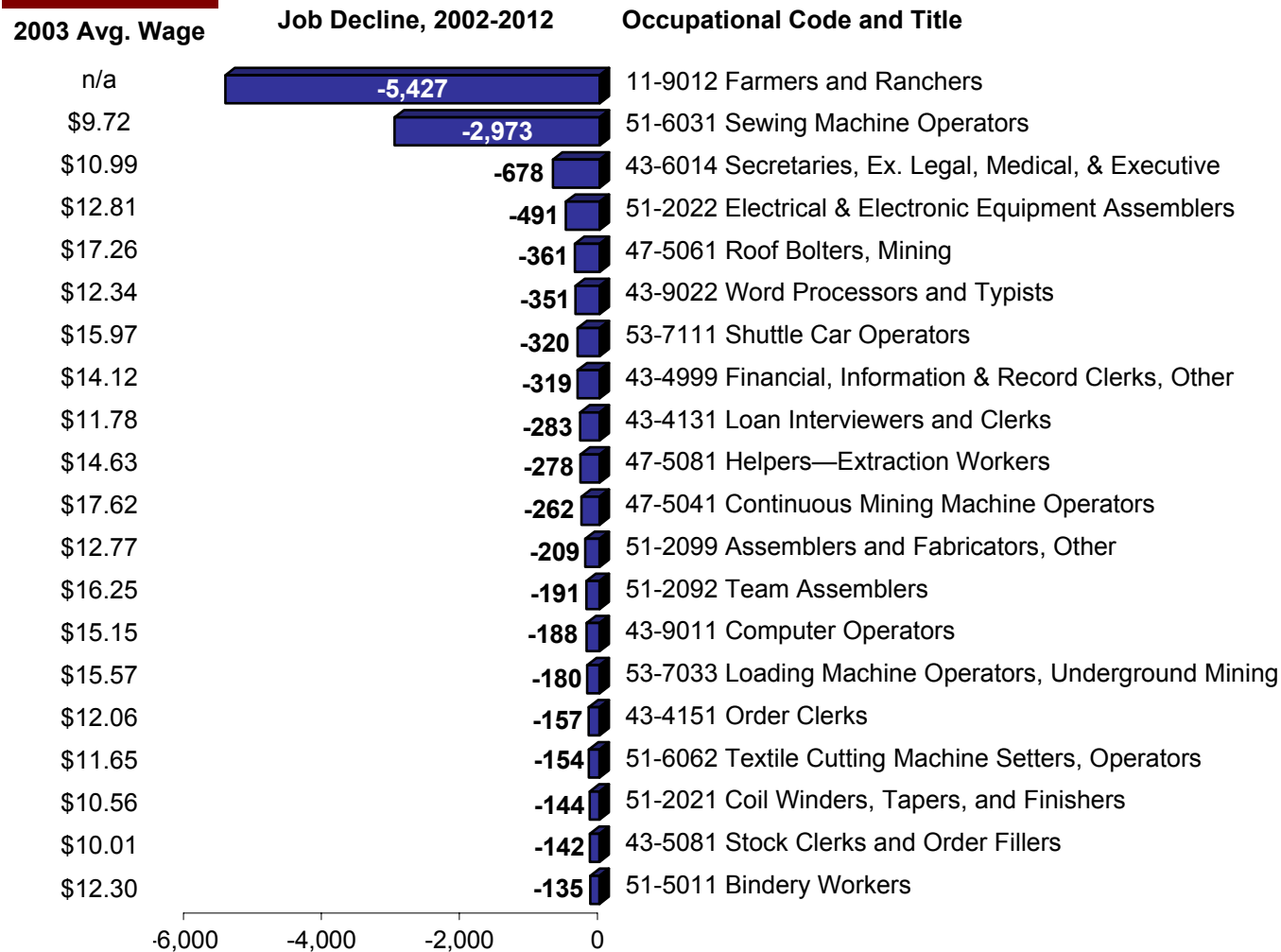
\* This chart groups occupations generally requiring work experience in a related occupation or short-term, on-the-job training. Occupations with less than 20 job openings per year are not included in this chart.

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Kentucky Occupations Losing the Largest Number of Jobs Between 2002 and 2012

**CHART 15**



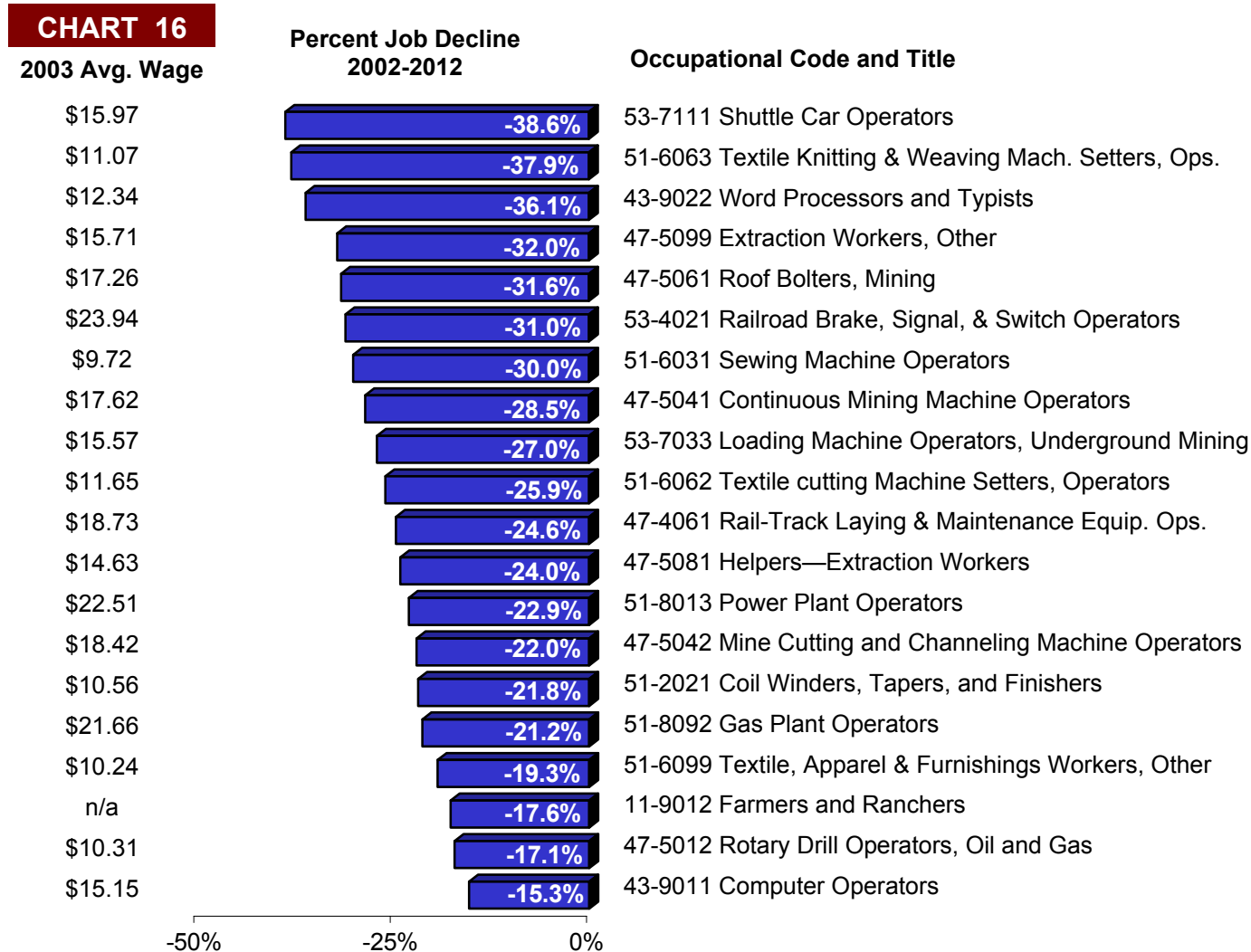
*Declining industry labor needs are among the major causes of the projected employment declines among the top two occupations on this chart. For example, Farming, Fishing, and Forestry Occupations will lose employment due to a combination of industry factors. Kentucky's agriculture is undergoing drastic changes in technology, techniques, automation and demand for Kentucky products.*

*Declining employment generally implies an occupation has an unfavorable job outlook. However, when the number of workers leaving or separating from an occupation is larger than the employment loss, some positions become available to job seekers.*

*Seven of these occupations are Office and Administrative Support Occupations and six are Production Occupations. Much of this can be attributed, in part, to technology, the automation of tasks, and computer operated machinery.*

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

## Twenty Fastest-Declining Kentucky Occupations Between 2002 and 2012\*



*Few of these fastest-declining occupations require advanced education beyond high school. Therefore, the occupations with employment decline will have a greater impact on lesser-educated workers.*

*Only one occupation, Coil Winders, Tapers, and Finishers, requires work experience in a related occupation. All of the others only require long-term, moderate-term, or short-term, on-the-job training. Eleven of the 20 require moderate-term, on-the-job training.*

*A large number of the occupations on this chart are directly related to the mining industry. As with the occupations detailed in Chart 15, the decline of mining can be attributed to technological advances and the automation of work processes.*

\* Occupations with Kentucky employment of less than 100 in 2002 or 2012 were not included in this chart

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



## Explanation of Data Elements on the Occupational Outlook Table

# Occupational Employment Outlook and Job Openings

Occupational		Employment 2002      2012		Job Growth 2002      2012		Average Annual Job Openings			Average Wage	Education/ Training Required
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	
<b>Occupational Codes &amp; Titles</b> Used in this report are based on the Standard Occupational Coding (SOC) Structure.  <b>NOTE:</b> Alphabetical listing beginning on page 64 should help locate a specific occupation within the tables.		<b>Estimated</b> 2002 employment is based on the Occupational Employment Statistics (OES) Survey of employers.  <b>Projected</b> 2012 levels of occupational employment are based on projections of industry employment and projections of occupational change factors between 2002 and 2012.  <b>NOTE:</b> The occupational employment estimates for 2002 to 2012 include all classes of workers such as public and private, wage and salaried workers; agricultural workers; private household workers; and self-employed.		<b>Number</b> The total number of jobs in an occupation gained or lost over the 2002 to 2012 period.  <b>Percent</b> Percent change in employment in an occupation over the 10 year period.  <b>NOTE:</b> In Kentucky, 16.8 percent job growth between 2002 and 2012 is the average growth for all occupations.  An occupation is expected to experience: <ol style="list-style-type: none"> <li>1) average growth if percent change is between 12 to 18%</li> <li>2) very fast growth if &gt; 30%</li> <li>3) fast growth if &lt; 30% &gt;18%</li> <li>4) slow growth if &lt;12% &gt;5%</li> <li>5) very slow growth if &lt;5% &gt;0%</li> <li>6) negative/declining growth &lt;0%</li> </ol>		<b>Growth</b> Provides estimates of the average number of job openings expected to occur each year between 2002 and 2012.  <b>Separations</b> Provides estimates of the average number of job openings expected to occur each year in an occupation, resulting from workers separating or leaving the occupation for such reasons as retirement, promotion, or simply transferring among occupations. These separations would require replacement workers.  <b>Total</b> The sum of an occupations <b>growth</b> and <b>separations</b> .  <b>NOTE:</b> If employment growth is negative, the total number of job openings will equal the number of separations. They are equal because the number of separations already takes into account the negative employment growth.			<b>Average Wage</b> in this report always refers to the 2003 mean hourly wage.  <b>NOTE:</b> Average hourly wages for each of the teacher occupations in this report were calculated from the average annual wage by assuming the average working months per year was 9.5 and average hours worked per week was 40.	<b>Education and/or Training Levels Required</b> Developed by the Bureau of Labor Statistics and grouped into eleven levels (1-11).  <b>NOTE:</b> The various levels are described in detail on page 76 of this report.

# Kentucky Statewide

## Management Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
00-0000	Total, All Occupations	1,881,897	2,197,908	316,011	16.8	31,601	44,498	76,099	n/a	n/a
11-0000	Management Occupations	132,033	149,159	17,126	13.0	1,713	2,075	3,788	n/a	n/a
11-1000	Top Executives	37,800	45,167	7,367	19.5	737	713	1,450	n/a	n/a
11-1011	Chief Executives	*	*	*	*	*	*	*	60.35	4
11-1021	General and Operations Managers	29,755	35,351	5,596	18.8	560	561	1,121	33.24	4
11-1031	Legislators	*	*	*	*	*	*	*	n/a	4
11-2000	Adv., Market., Promo., P.R. & Sales Managers	6,909	8,718	1,809	26.2	181	126	307	n/a	n/a
11-2011	Advertising and Promotions Managers	866	1,083	217	25.1	22	16	38	26.87	4
11-2021	Marketing Managers	1,950	2,311	361	18.5	36	36	72	36.69	4
11-2022	Sales Managers	3,477	4,606	1,129	32.5	113	64	177	37.40	4
11-2031	Public Relations Managers	616	718	102	16.6	10	11	21	29.34	4
11-3000	Operations Specialties Managers	21,062	25,234	4,172	19.8	417	367	784	n/a	n/a
11-3011	Administrative Services Managers	2,577	3,035	458	17.8	46	50	96	25.19	4
11-3021	Computer and Information Systems Managers	2,592	3,529	937	36.1	94	47	141	37.07	4
11-3031	Financial Managers	7,196	8,614	1,418	19.7	142	103	245	32.99	4
11-3040	Human Resources Managers	2,461	2,906	445	18.1	45	42	87	30.67	4
11-3051	Industrial Production Managers	2,791	3,175	384	13.8	38	54	92	33.76	5
11-3061	Purchasing Managers	1,719	1,821	102	5.9	10	37	47	27.09	4
11-3071	Transportation, Storage & Distribution Managers	1,726	2,154	428	24.8	43	34	77	28.96	8
11-9000	Other Management Occupations	66,262	70,040	3,778	5.7	378	869	1,247	n/a	n/a
11-9011	Farm, Ranch, and Other Agricultural Managers	1,451	1,701	250	17.2	25	25	50	27.96	4
11-9012	Farmers and Ranchers	30,783	25,356	-5,427	-17.6	0	181	181	n/a	9
11-9021	Construction Managers	4,113	5,625	1,512	36.8	151	75	226	30.45	5
11-9031	Education Admin., Preschool & Child Care	836	1,121	285	34.1	29	21	50	16.40	4
11-9032	Education Admin., Elementary & Secondary	2,623	3,429	806	30.7	81	65	146	n/a	4
11-9033	Education Administrators, Postsecondary	918	1,101	183	19.9	18	23	41	38.70	4
11-9039	Education Administrators, All Other	314	370	56	17.8	6	8	14	n/a	4
11-9041	Engineering Managers	2,035	2,260	225	11.1	23	41	64	41.17	4
11-9051	Food Service Managers	6,384	8,424	2,040	32.0	204	104	308	16.64	8
11-9061	Funeral Directors	553	608	55	9.9	6	16	22	20.37	6
11-9081	Lodging Managers	778	883	105	13.5	11	13	24	18.94	8

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Management Occupations (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
11-9111	Medical and Health Services Managers	3,690	4,589	899	24.4	90	72	162	32.32	4
11-9121	Natural Sciences Managers	364	397	33	9.1	3	7	10	42.36	4
11-9131	Postmasters and Mail Superintendents	719	805	86	12.0	9	14	23	22.59	8
11-9141	Property,Real Estate, Community Ass'n Managers	2,116	2,768	652	30.8	65	40	105	18.19	5
11-9151	Social and Community Service Managers	1,464	1,893	429	29.3	43	28	71	21.80	5
11-9199	Managers, Other	7,121	8,710	1,589	22.3	159	139	298	34.16	8

~ Education/Training Required Codes- Page 76      n/a - Not Available      \* Employment under 100 and unreliable data suppressed  
Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide

## Business & Financial Operations Occs.

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
13-0000 Business and Financial Operations Occupations		51,589	62,577	10,988	21.3	1,099	949	2,048	n/a	n/a
13-1000	Business Operations Specialists	29,066	35,149	6,083	20.9	608	535	1,143	n/a	n/a
13-1011	Agents & Managers- Artists, Performers & Athletes	*	*	*	*	*	*	*	13.86	4
13-1021	Purchasing Agents and Buyers, Farm Products	205	235	30	14.6	3	7	10	19.17	8
13-1022	Wholesale and Retail Buyers, Ex. Farm Products	1,198	1,325	127	10.6	13	31	44	18.95	8
13-1023	Purchasing Agents, Ex. Wholesale, Retail & Farm	3,072	3,378	306	10.0	31	76	107	22.28	8
13-1031	Claims Adjusters, Examiners, and Investigators	1,749	2,067	318	18.2	32	22	54	23.02	9
13-1032	Insurance Appraisers, Auto Damage	*	*	*	*	*	*	*	23.60	9
13-1041	Compliance Officer, Ex. Ag., Const., Health, Transp.	2,276	2,453	177	7.8	18	54	72	22.34	9
13-1051	Cost Estimators	2,054	2,495	441	21.5	44	46	90	21.62	8
13-1061	Emergency Management Specialists	173	232	59	34.1	6	4	10	15.69	8
13-1071	Employment, Recruitment & Placement Specialists	1,696	1,962	266	15.7	27	26	53	18.45	5
13-1072	Compensation, Benefits & Job Analysis Specialists	963	1,209	246	25.5	25	15	40	19.84	5
13-1073	Training and Development Specialists	3,178	3,936	758	23.9	76	49	125	20.14	5
13-1111	Management Analysts	2,512	3,338	826	32.9	83	34	117	27.11	4
13-1121	Meeting and Convention Planners	254	290	36	14.2	4	6	10	19.10	5
13-1199	Business Operations Specialists, All Other	9,589	12,047	2,458	25.6	246	163	409	24.86	5
13-2000	Financial Specialists	22,523	27,428	4,905	21.8	491	415	906	n/a	n/a
13-2011	Accountants and Auditors	10,297	13,269	2,972	28.9	297	194	491	24.23	5
13-2021	Appraisers and Assessors of Real Estate	650	907	257	39.5	26	14	40	27.40	7
13-2031	Budget Analysts	900	982	82	9.1	8	15	23	25.67	5
13-2041	Credit Analysts	301	358	57	18.9	6	5	11	24.54	5
13-2051	Financial Analysts	823	931	108	13.1	11	12	23	29.06	5
13-2052	Personal Financial Advisors	610	954	344	56.4	34	8	42	34.01	5
13-2053	Insurance Underwriters	668	740	72	10.8	7	12	19	19.96	5
13-2061	Financial Examiners	224	234	10	4.5	1	5	6	29.20	5
13-2071	Loan Counselors	*	*	*	*	*	*	*	13.99	5
13-2072	Loan Officers	3,191	3,772	581	18.2	58	51	109	22.61	5
13-2081	Tax Examiners, Collectors, and Revenue Agents	2,627	2,525	-102	-3.9	0	60	60	18.27	5
13-2082	Tax Preparers	*	*	*	*	*	*	*	n/a	10
13-2099	Financial Specialists, Other	1,405	1,615	210	14.9	21	25	46	20.15	5

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Computer & Mathematical Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total	2003	Req'd~
15-0000 Computer and Mathematical Occupations		25,915	34,040	8,125	31.4	813	344	1,157	n/a	n/a
15-1000	Computer Specialists	25,168	33,252	8,084	32.1	808	323	1,131	n/a	n/a
15-1011	Computer and Information Scientists, Research	*	*	*	*	*	*	*	41.44	2
15-1021	Computer Programmers	3,318	3,696	378	11.4	38	78	116	27.59	5
15-1031	Computer Software Engineers, Applications	3,786	4,983	1,197	31.6	120	37	157	30.33	5
15-1032	Computer Software Engineers, Systems Software	1,296	1,873	577	44.5	58	13	71	31.38	5
15-1041	Computer Support Specialists	5,773	7,402	1,629	28.2	163	71	234	17.22	6
15-1051	Computer Systems Analysts	4,058	5,194	1,136	28.0	114	46	160	31.01	5
15-1061	Database Administrators	*	*	*	*	*	*	*	27.05	5
15-1071	Network and Computer Systems Administrators	2,751	3,813	1,062	38.6	106	31	137	24.38	5
15-1081	Network Systems & Data Comm. Analysts	2,175	3,522	1,347	61.9	135	26	161	26.88	5
15-1099	Computer Specialists, All Other	1,037	1,390	353	34.0	35	12	47	26.57	6
15-2000	Mathematical Scientists	747	788	41	5.5	4	21	25	n/a	n/a
15-2011	Actuaries	*	*	*	*	*	*	*	n/a	4
15-2021	Mathematicians	*	*	*	*	*	*	*	n/a	3
15-2031	Operations Research Analysts	490	499	9	1.8	1	11	12	25.70	3
15-2041	Statisticians	*	*	*	*	*	*	*	23.01	3
15-2091	Mathematical Technicians	*	*	*	*	*	*	*	n/a	5
15-2099	Mathematical Science Occupations, Other	*	*	*	*	*	*	*	n/a	3

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Architecture & Engineering Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
17-0000	Architecture and Engineering Occupations	24,226	27,308	3,082	12.7	308	559	867	n/a	n/a
17-1000	Architects, Surveyors, and Cartographers	1,863	2,274	411	22.1	41	42	83	n/a	n/a
17-1011	Architects, Except Landscape and Naval	786	1,012	226	28.8	23	9	32	27.26	5
17-1012	Landscape Architects	152	206	54	35.5	5	2	7	23.91	5
17-1021	Cartographers and Photogrammetrists	255	313	58	22.7	6	9	15	17.44	5
17-1022	Surveyors	670	743	73	10.9	7	23	30	17.44	5
17-2000	Engineers	12,654	13,864	1,210	9.6	121	277	398	n/a	n/a
17-2011	Aerospace Engineers	*	*	*	*	*	*	*	n/a	5
17-2021	Agricultural Engineers	*	*	*	*	*	*	*	n/a	5
17-2031	Biomedical Engineers	*	*	*	*	*	*	*	29.64	5
17-2041	Chemical Engineers	346	324	-22	-6.4	0	10	10	36.08	5
17-2051	Civil Engineers	2,156	2,443	287	13.3	29	34	63	28.77	5
17-2061	Computer Hardware Engineers	*	*	*	*	*	*	*	n/a	5
17-2071	Electrical Engineers	914	961	47	5.1	5	18	23	30.33	5
17-2072	Electronics Engineers, Except Computer	512	607	95	18.6	10	10	20	33.73	5
17-2081	Environmental Engineers	285	414	129	45.3	13	5	18	30.29	5
17-2111	Health & Safety Engineers, Ex. Mining Safety	412	508	96	23.3	10	10	20	26.65	5
17-2112	Industrial Engineers	2,656	2,987	331	12.5	33	64	97	31.58	5
17-2121	Marine Engineers and Naval Architects	*	*	*	*	*	*	*	n/a	5
17-2131	Materials Engineers	255	269	14	5.5	1	7	8	30.34	5
17-2141	Mechanical Engineers	2,366	2,584	218	9.2	22	65	87	29.31	5
17-2151	Mining & Geological Engineers, Inc. Mining Safety	204	195	-9	-4.4	0	6	6	31.26	5
17-2161	Nuclear Engineers	*	*	*	*	*	*	*	n/a	5
17-2171	Petroleum Engineers	*	*	*	*	*	*	*	25.92	5
17-2199	Engineers, Other	1,649	1,860	211	12.8	21	31	52	40.46	5

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Architecture & Engineering Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002	2012	2002-2012		Average Annual 2002-2012				
		Estimated	Projected	Number	Percent	Growth	Separations	Total		Req'd~
17-3000	Drafters, Engineering, and Mapping Technicians	9,709	11,170	1,461	15.0	146	240	386	n/a	n/a
17-3011	Architectural and Civil Drafters	1,108	1,219	111	10.0	11	31	42	17.22	7
17-3012	Electrical and Electronics Drafters	398	361	-37	-9.3	0	11	11	18.46	7
17-3013	Mechanical Drafters	761	819	58	7.6	6	21	27	19.87	7
17-3021	Aerospace Engineering & Operations Technicians	*	*	*	*	*	*	*	n/a	6
17-3022	Civil Engineering Technicians	1,990	2,245	255	12.8	26	42	68	20.19	6
17-3023	Electrical and Electronic Engineering Technicians	1,727	2,074	347	20.1	35	36	71	22.23	6
17-3024	Electro-Mechanical Technicians	*	*	*	*	*	*	*	16.83	6
17-3025	Environmental Engineering Technicians	*	*	*	*	*	*	*	19.90	6
17-3026	Industrial Engineering Technicians	557	735	178	32.0	18	12	30	19.42	6
17-3027	Mechanical Engineering Technicians	518	579	61	11.8	6	11	17	18.94	6
17-3031	Surveying and Mapping Technicians	1,120	1,450	330	29.5	33	41	74	14.90	10
17-3099	Drafters, Engineering & Mapping Tech., Other	958	1,026	68	7.1	7	23	30	21.01	6

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Life, Physical & Social Science Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>19-0000 Life, Physical, and Social Science Occupations</b>		<b>10,081</b>	<b>11,814</b>	<b>1,733</b>	<b>17.2</b>	<b>173</b>	<b>232</b>	<b>405</b>	<b>n/a</b>	<b>n/a</b>
<b>19-1000</b>	<b>Life Scientists</b>	<b>1,984</b>	<b>2,220</b>	<b>236</b>	<b>11.9</b>	<b>24</b>	<b>40</b>	<b>64</b>	<b>n/a</b>	<b>n/a</b>
19-1010	Agricultural and Food Scientists	273	296	23	8.4	2	5	7	24.63	5
19-1021	Biochemists and Biophysicists	*	*	*	*	*	*	*	n/a	2
19-1022	Microbiologists	101	116	15	14.9	2	3	5	20.10	2
19-1023	Zoologists and Wildlife Biologists	103	109	6	5.8	1	3	4	20.72	5
19-1031	Conservation Scientists	200	190	-10	-5.0	0	6	6	26.44	5
19-1032	Foresters	*	*	*	*	*	*	*	n/a	5
19-1041	Epidemiologists	*	*	*	*	*	*	*	n/a	3
19-1042	Medical Scientists, Except Epidemiologists	*	*	*	*	*	*	*	n/a	2
19-1099	Life Scientists, All Other	*	*	*	*	*	*	*	n/a	5
<b>19-2000</b>	<b>Physical Scientists</b>	<b>1,800</b>	<b>2,071</b>	<b>271</b>	<b>15.1</b>	<b>27</b>	<b>44</b>	<b>71</b>	<b>n/a</b>	<b>n/a</b>
19-2012	Physicists	*	*	*	*	*	*	*	40.40	2
19-2021	Atmospheric and Space Scientists	*	*	*	*	*	*	*	33.90	5
19-2031	Chemists	806	887	81	10.0	8	26	34	29.49	5
19-2032	Materials Scientists	*	*	*	*	*	*	*	n/a	5
19-2041	Environmental Scientists & Specialists, Inc. Health	493	636	143	29.0	14	9	23	22.74	3
19-2042	Geoscientists, Except Hydrologists & Geographers	257	292	35	13.6	4	5	9	24.41	3
19-2043	Hydrologists	*	*	*	*	*	*	*	28.31	3
19-2099	Physical Scientists, All Other	112	120	8	7.1	1	3	4	27.50	5
<b>19-3000</b>	<b>Social Scientists and Related Workers</b>	<b>3,193</b>	<b>4,008</b>	<b>815</b>	<b>25.5</b>	<b>82</b>	<b>76</b>	<b>158</b>	<b>n/a</b>	<b>n/a</b>
19-3011	Economists	*	*	*	*	*	*	*	n/a	3
19-3021	Market Research Analysts	817	930	113	13.8	11	21	32	25.52	3
19-3022	Survey Researchers	*	*	*	*	*	*	*	12.96	3
19-3031	Clinical, Counseling, and School Psychologists	1,357	1,869	512	37.7	51	30	81	23.32	2
19-3051	Urban and Regional Planners	*	*	*	*	*	*	*	n/a	3
19-3091	Anthropologists and Archeologists	*	*	*	*	*	*	*	18.49	3
19-3092	Geographers	*	*	*	*	*	*	*	n/a	3
19-3093	Historians	*	*	*	*	*	*	*	n/a	3
19-3094	Political Scientists	*	*	*	*	*	*	*	n/a	3
19-3099	Social Scientists and Related Workers, Other	499	556	57	11.4	6	11	17	24.61	3

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Life, Physical & Social Science Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
19-4000	Life, Physical, and Social Science Technicians	3,104	3,515	411	13.2	41	72	113	n/a	n/a
19-4011	Agricultural and Food Science Technicians	175	187	12	6.9	1	3	4	15.46	6
19-4021	Biological Technicians	265	312	47	17.7	5	5	10	13.28	6
19-4031	Chemical Technicians	788	805	17	2.2	2	20	22	17.98	6
19-4041	Geological and Petroleum Technicians	*	*	*	*	*	*	*	13.03	6
19-4091	Environmental Sci. & Protection Tech., Inc. Health	617	850	233	37.8	23	15	38	16.76	6
19-4092	Forensic Science Technicians	*	*	*	*	*	*	*	n/a	6
19-4093	Forest and Conservation Technicians	407	422	15	3.7	2	10	12	13.18	6
19-4099	Life, Physical & Social Science Tech., Other	679	734	55	8.1	6	16	22	15.01	6

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Community & Social Service Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
21-0000	Community and Social Services Occupations	33,727	41,421	7,694	22.8	769	639	1,408	n/a	n/a
21-1000	Counselors, Social Workers, Other Specialists	20,208	26,053	5,845	28.9	585	378	963	n/a	n/a
21-1011	Substance Abuse & Behavioral Disorder Couns.	462	601	139	30.1	14	11	25	14.86	3
21-1012	Educational, Vocational, and School Counselors	2,284	2,716	432	18.9	43	52	95	22.47	3
21-1013	Marriage and Family Therapists	*	*	*	*	*	*	*	35.38	3
21-1014	Mental Health Counselors	1,553	2,038	485	31.2	49	36	85	14.10	3
21-1015	Rehabilitation Counselors	738	930	192	26.0	19	17	36	15.02	3
21-1021	Child, Family, and School Social Workers	*	*	*	*	*	*	*	n/a	5
21-1022	Medical and Public Health Social Workers	1,593	2,119	526	33.0	53	27	80	16.89	5
21-1023	Mental Health & Substance Abuse Social Workers	1,265	1,815	550	43.5	55	22	77	16.09	3
21-1091	Health Educators	581	730	149	25.6	15	10	25	16.89	3
21-1092	Probation Officers & Correctional Treatment Spec.	*	*	*	*	*	*	*	n/a	5
21-1093	Social and Human Service Assistants	3,896	5,851	1,955	50.2	196	69	265	11.35	10
21-2000	Religious Workers	12,652	14,274	1,622	12.8	162	245	407	n/a	n/a
21-2011	Clergy	11,106	12,421	1,315	11.8	132	228	360	17.49	1
21-2021	Directors, Religious Activities and Education	1,546	1,853	307	19.9	31	17	48	17.35	5
21-9000	Misc. Counselors, Social, & Religious Workers	*	*	*	*	*	*	*	n/a	n/a
21-9099	Counselors, Social & Religious Workers, Other	*	*	*	*	*	*	*	n/a	5

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide

## Legal Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
23-0000	Legal Occupations	12,757	16,066	3,309	25.9	331	144	475	n/a	n/a
23-1000	Lawyers, Judges, and Related Workers	7,009	9,245	2,236	31.9	224	90	314	n/a	n/a
23-1011	Lawyers	6,042	8,179	2,137	35.4	214	78	292	40.68	1
23-1021	Admin. Law Judges, Adjudicators, Hearing Officers	*	*	*	*	*	*	*	n/a	4
23-1022	Arbitrators, Mediators, and Conciliators	*	*	*	*	*	*	*	24.57	4
23-1023	Judges, Magistrate Judges, and Magistrates	*	*	*	*	*	*	*	n/a	4
23-2000	Legal Support Workers	3,968	5,037	1,069	26.9	107	35	142	n/a	n/a
23-2011	Paralegals and Legal Assistants	2,966	3,947	981	33.1	98	24	122	16.12	6
23-2091	Court Reporters	*	*	*	*	*	*	*	16.28	7
23-2092	Law Clerks	*	*	*	*	*	*	*	14.02	5
23-2093	Title Examiners, Abstractors, and Searchers	313	335	22	7.0	2	3	5	14.85	10
23-9000	Miscellaneous Legal & Related Workers	1,780	1,784	4	0.2	0	20	20	n/a	n/a
23-9099	Legal and Related Workers, Other	1,780	1,784	4	0.2	0	20	20	17.78	5

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Education, Training & Library Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>25-0000 Education, Training, and Library Occupations</b>		<b>100,464</b>	<b>132,414</b>	<b>31,950</b>	<b>31.8</b>	<b>3,195</b>	<b>2,010</b>	<b>5,205</b>	<b>n/a</b>	<b>n/a</b>
<b>25-1000</b>	<b>Postsecondary Teachers</b>	<b>16,725</b>	<b>22,162</b>	<b>5,437</b>	<b>32.5</b>	<b>544</b>	<b>366</b>	<b>910</b>	<b>n/a</b>	<b>n/a</b>
25-1011	Business Teachers, Postsecondary #	811	1,072	261	32.2	26	18	44	41.93	3
25-1021	Computer Science Teachers, Postsecondary #	531	699	168	31.6	17	12	29	35.41	3
25-1022	Mathematical Science Teachers, Postsecondary #	614	794	180	29.3	18	14	32	31.58	3
25-1031	Architecture Teachers, Postsecondary #	*	*	*	*	*	*	*	42.29	2
25-1032	Engineering Teachers, Postsecondary #	274	352	78	28.5	8	6	14	46.76	2
25-1041	Agricultural Sciences Teachers, Postsecondary #	225	289	64	28.4	6	5	11	45.46	2
25-1042	Biological Science Teachers, Postsecondary #	1,100	1,422	322	29.3	32	25	57	31.77	2
25-1043	Forestry & Conservation Sci. Teachers, Postsec.	*	*	*	*	*	*	*	n/a	2
25-1051	Atmospheric, Earth, Marine, Space Sci. Teachers #	*	*	*	*	*	*	*	38.56	2
25-1052	Chemistry Teachers, Postsecondary #	224	296	72	32.1	7	5	12	34.41	2
25-1054	Physics Teachers, Postsecondary #	119	159	40	33.6	4	3	7	37.96	2
25-1061	Anthropology & Archeology Teachers, Postsec. #	*	*	*	*	*	*	*	33.75	2
25-1062	Area, Ethnic, Cultural Studies Teachers, Postsec. #	*	*	*	*	*	*	*	34.78	2
25-1063	Economics Teachers, Postsecondary #	190	248	58	30.5	6	4	10	48.51	2
25-1064	Geography Teachers, Postsecondary #	*	*	*	*	*	*	*	34.15	2
25-1065	Political Science Teachers, Postsecondary #	162	214	52	32.1	5	4	9	39.11	2
25-1066	Psychology Teachers, Postsecondary #	395	518	123	31.1	12	9	21	36.62	2
25-1067	Sociology Teachers, Postsecondary #	134	175	41	30.6	4	3	7	30.42	2
25-1071	Health Specialties Teachers, Postsecondary #	1,714	2,253	539	31.4	54	39	93	48.89	3
25-1072	Nursing Instructors & Teachers, Postsecondary #	515	710	195	37.9	20	12	32	32.67	2
25-1081	Education Teachers, Postsecondary #	1,057	1,396	339	32.1	34	24	58	32.35	2
25-1082	Library Science Teachers, Postsecondary	*	*	*	*	*	*	*	n/a	2
25-1111	Criminal Justice & Law Enforcement Teachers #	*	*	*	*	*	*	*	37.31	2
25-1112	Law Teachers, Postsecondary	*	*	*	*	*	*	*	n/a	1
25-1113	Social Work Teachers, Postsecondary #	146	191	45	30.8	5	3	8	32.25	2

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

# Kentucky Statewide

## Education, Training & Library Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002	2012	2002-2012		Average Annual 2002-2012				
		Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
25-1121	Art, Drama, and Music Teachers, Postsecondary #	679	904	225	33.1	23	15	38	29.76	3
25-1122	Communications Teachers, Postsecondary #	414	540	126	30.4	13	9	22	28.68	2
25-1123	English Language & Lit. Teachers, Postsec. #	760	994	234	30.8	23	17	40	27.58	3
25-1124	Foreign Language & Lit. Teachers, Postsec. #	227	300	73	32.2	7	5	12	31.17	3
25-1125	History Teachers, Postsecondary #	247	324	77	31.2	8	6	14	33.88	2
25-1126	Philosophy & Religion Teachers, Postsecondary #	236	319	83	35.2	8	5	13	31.62	2
25-1191	Graduate Teaching Assistants	*	*	*	*	*	*	*	n/a	5
25-1192	Home Economics Teachers, Postsecondary #	*	*	*	*	*	*	*	31.66	3
25-1193	Recreation & Fitness Studies Teachers, Postsec. #	172	222	50	29.1	5	4	9	30.40	3
25-1194	Vocational Education Teachers, Postsecondary	3,263	4,572	1,309	40.1	131	74	205	19.50	8
25-1199	Postsecondary Teachers, All Other #	1,640	2,068	428	26.1	43	37	80	35.93	2
25-2000	Primary, Secondary & Special Education Teachers	44,545	56,504	11,959	26.8	1,196	990	2,186	n/a	n/a
25-2011	Preschool Teachers, Except Special Education	4,811	6,631	1,820	37.8	182	57	239	9.50	7
25-2012	Kindergarten Teachers, Ex. Special Education #	1,305	1,786	481	36.9	48	16	64	24.75	5
25-2021	Elementary School Teachers, Ex. Special Ed. #	15,853	19,521	3,668	23.1	367	350	717	24.75	5
25-2022	Middle School Teachers, Ex. Special & Voc. Ed. #	7,094	8,282	1,188	16.7	119	157	276	24.96	5
25-2023	Vocational Education Teachers, Middle School #	*	*	*	*	*	*	*	25.86	4
25-2031	Secondary School Teachers, Ex. Spec. & Voc. Ed. #	9,008	11,410	2,402	26.7	240	254	494	25.55	5
25-2032	Vocational Ed. Teachers, Secondary School #	*	*	*	*	*	*	*	27.82	4
25-2041	Special Ed. Teach., Presch., Kindergarten, Elem. #	2,698	3,798	1,100	40.8	110	64	174	24.22	5
25-2042	Special Education Teachers, Middle School #	1,327	1,859	532	40.1	53	32	85	24.19	5
25-2043	Special Education Teachers, Secondary School #	1,535	2,145	610	39.7	61	37	98	25.48	5
25-3000	Other Teachers and Instructors	16,084	24,286	8,202	51.0	820	198	1,018	n/a	n/a
25-3011	Adult Literacy, Remedial Ed. & GED Teachers	529	687	158	29.9	16	7	23	15.25	5
25-3021	Self-Enrichment Education Teachers	990	1,581	591	59.7	59	12	71	15.60	8
25-3999	Teachers, Primary, Secondary & Adult, Other #	14,565	22,018	7,453	51.2	745	179	924	17.54	5
25-4000	Librarians, Curators, and Archivists	3,083	3,578	495	16.1	50	84	134	n/a	n/a
25-4010	Archivists, Curators, and Museum Technicians	214	238	24	11.2	2	5	7	16.20	3
25-4021	Librarians	2,041	2,347	306	15.0	31	49	80	19.87	3
25-4031	Library Technicians	828	993	165	19.9	17	31	48	10.48	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

# Kentucky Statewide

## Education, Training & Library Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
25-9000	Other Education, Training & Library Occupations	20,027	25,884	5,857	29.2	586	372	958	n/a	n/a
25-9011	Audio-Visual Collections Specialists	*	*	*	*	*	*	*	17.81	10
25-9021	Farm and Home Management Advisors	*	*	*	*	*	*	*	24.81	5
25-9031	Instructional Coordinators	1,466	1,851	385	26.3	39	22	61	23.31	3
25-9041	Teacher Assistants #	16,489	21,572	5,083	30.8	508	319	827	11.98	11
25-9199	Library, Museum, Training & Other Ed. Workers	1,480	1,855	375	25.3	38	23	61	14.72	5

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Average hourly wages for teacher occupations were calculated by assuming the average working months per year was 9.5 and hours worked per week was 40.

# Kentucky Statewide

## Arts, Design, Entertainment, Sports, Media Occs.

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
27-0000	Arts, Design, Entertain., Sports & Media Occs.	19,873	25,493	5,620	28.3	562	385	947	n/a	n/a
27-1000	Art and Design Workers	7,094	9,173	2,079	29.3	208	106	314	n/a	n/a
27-1011	Art Directors	659	887	228	34.6	23	14	37	30.72	4
27-1013	Fine Artists, Inc. Painters, Sculptors & Illustrators	*	*	*	*	*	*	*	16.12	9
27-1014	Multi-Media Artists and Animators	478	616	138	28.9	14	10	24	23.81	5
27-1021	Commercial and Industrial Designers	474	630	156	32.9	16	6	22	21.26	5
27-1022	Fashion Designers	103	128	25	24.3	3	1	4	11.86	5
27-1023	Floral Designers	1,755	2,070	315	17.9	32	23	55	8.08	10
27-1024	Graphic Designers	1,772	2,455	683	38.5	68	24	92	17.11	5
27-1025	Interior Designers	501	690	189	37.7	19	7	26	19.61	5
27-1026	Merchandise Displayers and Window Trimmers	894	1,124	230	25.7	23	12	35	9.94	10
27-1027	Set and Exhibit Designers	*	*	*	*	*	*	*	14.15	5
27-1099	Art and Design Workers, Other	287	355	68	23.7	7	5	12	16.68	5
27-2000	Entertainers, Performers, Sports & Related	3,784	4,934	1,150	30.4	115	95	210	n/a	n/a
27-2011	Actors	*	*	*	*	*	*	*	n/a	9
27-2012	Producers and Directors	690	845	155	22.5	16	10	26	n/a	4
27-2021	Athletes and Sports Competitors	*	*	*	*	*	*	*	n/a	9
27-2022	Coaches and Scouts	1,368	1,853	485	35.5	49	26	75	n/a	9
27-2023	Umpires, Referees, and Other Sports Officials	*	*	*	*	*	*	*	n/a	9
27-2031	Dancers	230	248	18	7.8	2	14	16	8.57	9
27-2032	Choreographers	395	616	221	55.9	22	24	46	14.37	8
27-2041	Music Directors and Composers	*	*	*	*	*	*	*	n/a	4
27-2042	Musicians and Singers	417	490	73	17.5	7	9	16	n/a	9
27-2099	Entertainers, Performers, Sports & Related, Other	187	234	47	25.1	5	2	7	n/a	9
27-3000	Media and Communication Workers	6,850	8,629	1,779	26.0	178	139	317	n/a	n/a
27-3010	Announcers	1,179	1,166	-13	-1.1	0	30	30	10.91	9
27-3020	News Analysts, Reporters and Correspondents	842	1,015	173	20.5	17	20	37	15.55	4
27-3031	Public Relations Specialists	1,866	2,454	588	31.5	59	27	86	18.24	5
27-3041	Editors	1,210	1,538	328	27.1	33	29	62	16.53	5
27-3042	Technical Writers	314	383	69	22.0	7	9	16	22.40	5
27-3043	Writers and Authors	1,179	1,743	564	47.8	56	20	76	20.37	5
27-3091	Interpreters and Translators	125	170	45	36.0	5	2	7	18.21	9
27-3099	Media and Communication Workers, All Other	135	160	25	18.5	3	2	5	19.74	9

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

Arts, Design, Entertainment, Sports, Media Occs (cont'd)

## Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
27-4000	Media and Communication Equipment Workers	2,145	2,757	612	28.5	61	45	106	n/a	n/a
27-4011	Audio and Video Equipment Technicians	194	250	56	28.9	6	5	11	14.44	9
27-4012	Broadcast Technicians	441	513	72	16.3	7	11	18	13.37	6
27-4014	Sound Engineering Technicians	*	*	*	*	*	*	*	n/a	7
27-4021	Photographers	1,064	1,473	409	38.4	41	22	63	12.31	9
27-4031	Camera Operators, TV, Video & Motion Picture	200	232	32	16.0	3	4	7	14.69	10
27-4032	Film and Video Editors	100	124	24	24.0	2	2	4	12.10	5
27-4099	Media & Communication Equip. Workers, Other	*	*	*	*	*	*	*	17.54	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Healthcare Practitioners & Technical Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>29-0000 Healthcare Practitioners &amp; Technical Occupations</b>		<b>97,739</b>	<b>117,817</b>	<b>20,078</b>	<b>20.5</b>	<b>2,008</b>	<b>1,856</b>	<b>3,864</b>	<b>n/a</b>	<b>n/a</b>
<b>29-1000</b>	<b>Health Diagnosing and Treating Practitioners</b>	<b>57,607</b>	<b>70,202</b>	<b>12,595</b>	<b>21.9</b>	<b>1,260</b>	<b>1,125</b>	<b>2,385</b>	<b>n/a</b>	<b>n/a</b>
29-1011	Chiropractors	386	572	186	48.2	19	7	26	27.89	1
29-1020	Dentists	1,282	1,513	231	18.0	23	22	45	68.39	1
29-1031	Dietitians and Nutritionists	680	820	140	20.6	14	18	32	20.61	5
29-1041	Optometrists	419	514	95	22.7	10	12	22	37.33	1
29-1051	Pharmacists	3,754	4,831	1,077	28.7	108	73	181	38.88	1
29-1061	Anesthesiologists	248	326	78	31.5	8	3	11	102.12	1
29-1062	Family and General Practitioners	839	1,078	239	28.5	24	11	35	69.71	1
29-1063	Internists, General	809	1,050	241	29.8	24	11	35	84.99	1
29-1064	Obstetricians and Gynecologists	430	566	136	31.6	14	6	20	96.12	1
29-1065	Pediatricians, General	448	591	143	31.9	14	6	20	61.49	1
29-1066	Psychiatrists	354	462	108	30.5	11	5	16	73.19	1
29-1067	Surgeons	1,229	1,622	393	32.0	39	16	55	85.43	1
29-1069	Physicians and Surgeons, All Other	2,216	2,522	306	13.8	31	30	61	67.11	1
29-1071	Physician Assistants	728	1,075	347	47.7	35	11	46	30.21	5
29-1081	Podiatrists	*	*	*	*	*	*	*	n/a	1
29-1111	Registered Nurses	36,513	43,054	6,541	17.9	654	764	1,418	22.35	6
29-1121	Audiologists	*	*	*	*	*	*	*	22.98	3
29-1122	Occupational Therapists	1,088	1,463	375	34.5	38	15	53	25.43	5
29-1123	Physical Therapists	2,010	2,738	728	36.2	73	20	93	27.51	3
29-1124	Radiation Therapists	117	133	16	13.7	2	3	5	24.59	6
29-1125	Recreational Therapists	198	213	15	7.6	2	5	7	13.69	5
29-1126	Respiratory Therapists	1,379	1,710	331	24.0	33	45	78	17.83	6
29-1127	Speech-Language Pathologists	1,367	1,835	468	34.2	47	34	81	23.01	3
29-1131	Veterinarians	578	794	216	37.4	22	14	36	36.87	1
29-1199	Health Diagnosing & Treating Practitioners, Other	325	450	125	38.5	13	7	20	52.29	5

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide

## Healthcare Practitioners & Technical Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total	2003	Req'd~
29-2000	Health Technologists and Technicians	37,272	44,345	7,073	19.0	707	674	1,381	n/a	n/a
29-2011	Medical and Clinical Laboratory Technologists	2,481	2,627	146	5.9	15	67	82	19.59	5
29-2012	Medical and Clinical Laboratory Technicians	1,860	2,119	259	13.9	26	50	76	14.84	6
29-2021	Dental Hygienists	*	*	*	*	*	*	*	n/a	6
29-2031	Cardiovascular Technologists and Technicians	808	979	171	21.2	17	15	32	15.78	6
29-2032	Diagnostic Medical Sonographers	422	472	50	11.8	5	8	13	22.36	6
29-2033	Nuclear Medicine Technologists	251	276	25	10.0	3	5	8	21.04	6
29-2034	Radiologic Technologists and Technicians	3,429	3,848	419	12.2	42	64	106	18.04	6
29-2041	Emergency Medical Technicians and Paramedics	4,028	5,167	1,139	28.3	114	46	160	10.45	7
29-2051	Dietetic Technicians	133	149	16	12.0	2	2	4	12.08	10
29-2052	Pharmacy Technicians	3,753	4,702	949	25.3	95	49	144	10.54	10
29-2053	Psychiatric Technicians	456	390	-66	-14.5	0	6	6	11.38	10
29-2054	Respiratory Therapy Technicians	846	1,017	171	20.2	17	11	28	15.25	7
29-2055	Surgical Technologists	1,499	1,820	321	21.4	32	20	52	14.78	7
29-2056	Veterinary Technologists and Technicians	514	736	222	43.2	22	7	29	10.50	6
29-2061	Licensed Practical & Licensed Vocational Nurses	11,945	13,515	1,570	13.1	157	260	417	14.87	7
29-2071	Medical Records & Health Information Technicians	2,519	3,522	1,003	39.8	100	36	136	12.49	6
29-2081	Opticians, Dispensing	972	1,113	141	14.5	14	17	31	12.13	9
29-2091	Orthotists and Prosthetists	*	*	*	*	*	*	*	n/a	5
29-9000	Other Healthcare Practitioners & Technical Occs.	1,458	1,652	194	13.3	19	32	51	n/a	n/a
29-9010	Occupational Health & Safety Specialists & Techs.	1,277	1,418	141	11.0	14	28	42	23.61	5
29-9091	Athletic Trainers	181	234	53	29.3	5	4	9	n/a	5
29-9199	Health Professionals and Technicians, Other	1,402	1,618	216	15.4	22	25	47	15.42	7

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Healthcare Support Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
31-0000	Healthcare Support Occupations	47,446	61,095	13,649	28.8	1,365	751	2,116	n/a	n/a
31-1000	Nursing, Psychiatric, and Home Health Aides	28,837	35,250	6,413	22.2	641	378	1,019	n/a	n/a
31-1011	Home Health Aides	4,576	5,856	1,280	28.0	128	60	188	9.11	11
31-1012	Nursing Aides, Orderlies, and Attendants	23,873	28,999	5,126	21.5	513	313	826	9.32	11
31-1013	Psychiatric Aides	388	395	7	1.8	1	5	6	10.18	11
31-2000	Occupational & Physical Therapist Assist. & Aides	1,661	2,360	699	42.1	70	27	97	n/a	n/a
31-2011	Occupational Therapist Assistants	*	*	*	*	*	*	*	17.53	6
31-2012	Occupational Therapist Aides	*	*	*	*	*	*	*	14.05	11
31-2021	Physical Therapist Assistants	871	1,217	346	39.7	35	15	50	16.95	6
31-2022	Physical Therapist Aides	573	830	257	44.9	26	10	36	9.35	11
31-9000	Other Healthcare Support Occupations	16,948	23,485	6,537	38.6	654	346	1,000	n/a	n/a
31-9011	Massage Therapists	435	701	266	61.1	27	8	35	11.86	7
31-9091	Dental Assistants	3,422	4,765	1,343	39.2	134	96	230	12.37	10
31-9092	Medical Assistants	6,037	9,743	3,706	61.4	371	112	483	11.21	10
31-9093	Medical Equipment Preparers	721	791	70	9.7	7	13	20	11.44	11
31-9094	Medical Transcriptionists	1,852	2,197	345	18.6	35	34	69	12.57	7
31-9095	Pharmacy Aides	1,037	1,251	214	20.6	21	19	40	8.72	11
31-9096	Veterinary Assist. & Laboratory Animal Caretakers	733	929	196	26.7	20	14	34	8.92	11
31-9099	Healthcare Support Workers, All Other	2,711	3,108	397	14.6	40	50	90	10.80	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Protective Service Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
33-0000	Protective Service Occupations	33,974	41,570	7,596	22.4	760	975	1,735	n/a	n/a
33-1000	Managers, Protective Service Workers	3,548	4,386	838	23.6	84	116	200	n/a	n/a
33-1011	Managers of Correctional Officers	*	*	*	*	*	*	*	n/a	8
33-1012	Managers of Police and Detectives	1,334	1,684	350	26.2	35	44	79	24.50	8
33-1021	Managers of Fire Fighting and Prevention Workers	823	1,092	269	32.7	27	34	61	18.78	8
33-1099	Managers, Protective Service Workers, Other	*	*	*	*	*	*	*	16.41	8
33-2000	Fire Fighting and Prevention Workers	3,411	4,553	1,142	33.5	114	99	213	n/a	n/a
33-2011	Fire Fighters	3,284	4,402	1,118	34.0	112	95	207	12.32	9
33-2021	Fire Inspectors and Investigators	*	*	*	*	*	*	*	18.20	8
33-2022	Forest Fire Inspectors and Prevention Specialists	*	*	*	*	*	*	*	n/a	8
33-3000	Law Enforcement Workers	12,106	15,798	3,692	30.5	369	284	653	n/a	n/a
33-3011	Bailiffs	*	*	*	*	*	*	*	n/a	10
33-3012	Correctional Officers and Jailers	5,422	6,799	1,377	25.4	138	113	251	11.98	10
33-3021	Detectives and Criminal Investigators	573	719	146	25.5	15	15	30	23.78	8
33-3031	Fish and Game Wardens	*	*	*	*	*	*	*	n/a	9
33-3041	Parking Enforcement Workers	*	*	*	*	*	*	*	10.29	11
33-3051	Police and Sheriff's Patrol Officers	5,764	7,881	2,117	36.7	212	149	361	15.96	9
33-3052	Transit and Railroad Police	*	*	*	*	*	*	*	n/a	9
33-9000	Other Protective Service Workers	14,909	16,833	1,924	12.9	192	476	668	n/a	n/a
33-9011	Animal Control Workers	*	*	*	*	*	*	*	n/a	10
33-9021	Private Detectives and Investigators	546	701	155	28.4	16	12	28	12.67	8
33-9032	Security Guards	11,013	12,277	1,264	11.5	126	240	366	9.38	11
33-9091	Crossing Guards	*	*	*	*	*	*	*	9.23	11
33-9099	Protective Service Workers, All Other	2,823	3,171	348	12.3	35	196	231	11.69	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Food Preparation & Serving Related Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>35-0000 Food Preparation and Serving Related Occupations</b>		<b>139,879</b>	<b>172,402</b>	<b>32,523</b>	<b>23.3</b>	<b>3,252</b>	<b>5,406</b>	<b>8,658</b>	<b>n/a</b>	<b>n/a</b>
<b>35-1000 Supervisors, Food Preparation &amp; Serving Workers</b>		<b>12,993</b>	<b>15,803</b>	<b>2,810</b>	<b>21.6</b>	<b>281</b>	<b>317</b>	<b>598</b>	<b>n/a</b>	<b>n/a</b>
35-1011	Chefs and Head Cooks	1,312	1,680	368	28.0	37	39	76	12.10	8
35-1012	Managers of Food Preparation & Serving Workers	11,681	14,123	2,442	20.9	244	278	522	11.08	8
<b>35-2000 Cooks and Food Preparation Workers</b>		<b>46,479</b>	<b>54,247</b>	<b>7,768</b>	<b>16.7</b>	<b>777</b>	<b>1,480</b>	<b>2,257</b>	<b>n/a</b>	<b>n/a</b>
35-2011	Cooks, Fast Food	15,037	16,073	1,036	6.9	104	466	570	7.10	11
35-2012	Cooks, Institution and Cafeteria	10,685	11,088	403	3.8	40	331	371	8.62	10
35-2013	Cooks, Private Household	*	*	*	*	*	*	*	n/a	9
35-2014	Cooks, Restaurant	8,414	11,374	2,960	35.2	296	261	557	8.93	9
35-2015	Cooks, Short Order	*	*	*	*	*	*	*	7.30	11
35-2021	Food Preparation Workers	9,361	12,053	2,692	28.8	269	331	600	8.12	11
<b>35-3000 Food and Beverage Serving Workers</b>		<b>67,834</b>	<b>86,254</b>	<b>18,420</b>	<b>27.2</b>	<b>1,842</b>	<b>3,193</b>	<b>5,035</b>	<b>n/a</b>	<b>n/a</b>
35-3011	Bartenders	4,045	4,721	676	16.7	68	160	228	7.13	11
35-3021	Combined Food Prep. & Serving Workers	33,091	40,990	7,899	23.9	790	1,434	2,224	6.79	11
35-3022	Counter Attendants, Cafeteria & Food Concession	4,026	4,721	695	17.3	70	263	333	7.01	11
35-3031	Waiters and Waitresses	24,661	33,655	8,994	36.5	899	1,269	2,168	6.74	11
35-3041	Food Servers, Nonrestaurant	2,011	2,167	156	7.8	16	67	83	7.81	11
<b>35-9000 Other Food Prep. &amp; Serving Related Workers</b>		<b>12,573</b>	<b>16,098</b>	<b>3,525</b>	<b>28.0</b>	<b>353</b>	<b>416</b>	<b>769</b>	<b>n/a</b>	<b>n/a</b>
35-9011	Dining Room, Cafeteria Attend. & Bartender Help.	3,060	3,927	867	28.3	87	102	189	7.27	11
35-9021	Dishwashers	5,589	6,811	1,222	21.9	122	189	311	7.33	11
35-9031	Hosts & Hostesses, Restaurant & Lounge	3,587	4,971	1,384	38.6	138	114	252	7.35	11
35-9099	Food Prep. & Serving Related Workers, Other	337	389	52	15.4	5	11	16	8.69	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Building, Grounds Cleaning & Maintenance Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
37-0000	Building, Grounds Cleaning & Maintenance Occs.	61,345	72,629	11,284	18.4	1,128	1,228	2,356	n/a	n/a
37-1000	Supervisors, Building & Grounds Cleaning	4,756	5,751	995	20.9	100	89	189	n/a	n/a
37-1011	Managers of Housekeeping & Janitorial Workers	3,115	3,566	451	14.5	45	74	119	12.21	8
37-1012	Managers of Landscaping, Lawn & Grounds. Work.	1,641	2,185	544	33.2	54	15	69	16.49	8
37-2000	Building Cleaning and Pest Control Workers	42,997	49,449	6,452	15.0	645	845	1,490	n/a	n/a
37-2011	Janitors & Cleaners, Ex. Maids & Housekeeping	26,801	31,539	4,738	17.7	474	509	983	8.75	11
37-2012	Maids and Housekeeping Cleaners	15,519	17,142	1,623	10.5	162	326	488	7.93	11
37-2021	Pest Control Workers	677	768	91	13.4	9	10	19	12.78	10
37-3000	Grounds Maintenance Workers	13,592	17,429	3,837	28.2	384	295	679	n/a	n/a
37-3011	Landscaping and Groundskeeping Workers	11,133	14,343	3,210	28.8	321	242	563	9.69	11
37-3012	Pesticide Handlers, Sprayers & Applicators, Veg.	*	*	*	*	*	*	*	13.68	10
37-3013	Tree Trimmers and Pruners	1,467	1,769	302	20.6	30	32	62	11.02	11
37-9099	Building, Grounds Cleaning & Maint. Work., Other	*	*	*	*	*	*	*	9.86	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Personal Care & Service Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>39-0000</b>	<b>Personal Care and Service Occupations</b>	<b>44,941</b>	<b>60,116</b>	<b>15,175</b>	<b>33.8</b>	<b>1,518</b>	<b>1,113</b>	<b>2,631</b>	<b>n/a</b>	<b>n/a</b>
<b>39-1000</b>	<b>Supervisors, Personal Care and Service Workers</b>	<b>2,086</b>	<b>2,703</b>	<b>617</b>	<b>29.6</b>	<b>62</b>	<b>52</b>	<b>114</b>	<b>n/a</b>	<b>n/a</b>
39-1021	Managers of Personal Service Workers	2,086	2,703	617	29.6	62	52	114	13.34	8
<b>39-2000</b>	<b>Animal Care and Service Workers</b>	<b>2,301</b>	<b>3,172</b>	<b>871</b>	<b>37.9</b>	<b>87</b>	<b>55</b>	<b>142</b>	<b>n/a</b>	<b>n/a</b>
39-2011	Animal Trainers	425	651	226	53.2	23	9	32	13.75	10
39-2021	Nonfarm Animal Caretakers	1,876	2,521	645	34.4	65	47	112	8.00	11
<b>39-3000</b>	<b>Entertainment Attendants and Related Workers</b>	<b>3,651</b>	<b>4,447</b>	<b>796</b>	<b>21.8</b>	<b>80</b>	<b>145</b>	<b>225</b>	<b>n/a</b>	<b>n/a</b>
39-3012	Gaming and Sports Book Writers and Runners	*	*	*	*	*	*	*	n/a	7
39-3021	Motion Picture Projectionists	120	121	1	0.8	0	6	6	8.95	11
39-3031	Ushers, Lobby Attendants, and Ticket Takers	1,314	1,533	219	16.7	22	75	97	7.46	11
39-3091	Amusement and Recreation Attendants	1,824	2,326	502	27.5	50	53	103	7.39	11
39-3092	Costume Attendants	*	*	*	*	*	*	*	n/a	11
39-3093	Locker Room, Coatroom & Dressing Room Attend.	*	*	*	*	*	*	*	n/a	11
<b>39-4000</b>	<b>Funeral Service Workers</b>	<b>603</b>	<b>695</b>	<b>92</b>	<b>15.3</b>	<b>9</b>	<b>13</b>	<b>22</b>	<b>n/a</b>	<b>n/a</b>
39-4011	Embalmers	240	261	21	8.8	2	5	7	16.53	7
39-4021	Funeral Attendants	363	434	71	19.6	7	8	15	7.81	11
<b>39-5000</b>	<b>Personal Appearance Workers</b>	<b>7,135</b>	<b>9,469</b>	<b>2,334</b>	<b>32.7</b>	<b>233</b>	<b>142</b>	<b>375</b>	<b>n/a</b>	<b>n/a</b>
39-5011	Barbers	471	650	179	38.0	18	13	31	14.80	7
39-5012	Hairdressers, Hairstylists, and Cosmetologists	6,022	7,920	1,898	31.5	190	116	306	11.30	7
39-5091	Makeup Artists, Theatrical and Performance	*	*	*	*	*	*	*	9.02	7
39-5092	Manicurists and Pedicurists	375	531	156	41.6	16	7	23	11.26	7
39-5093	Shampooers	*	*	*	*	*	*	*	7.94	11
39-5094	Skin Care Specialists	187	258	71	38.0	7	4	11	11.70	7
<b>39-6000</b>	<b>Transportation, Tourism, and Lodging Attendants</b>	<b>2,664</b>	<b>2,975</b>	<b>311</b>	<b>11.7</b>	<b>31</b>	<b>45</b>	<b>76</b>	<b>n/a</b>	<b>n/a</b>
39-6011	Baggage Porters and Bellhops	308	322	14	4.5	1	8	9	7.06	11
39-6012	Concierges	*	*	*	*	*	*	*	7.99	10
39-6021	Tour Guides and Escorts	322	345	23	7.1	2	9	11	8.95	10
39-6022	Travel Guides	*	*	*	*	*	*	*	10.99	10
39-6031	Flight Attendants	*	*	*	*	*	*	*	n/a	9
39-6032	Transp. Attend., Ex. Flight Attend., Baggage Porters	*	*	*	*	*	*	*	n/a	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Personal Care & Service Occupations (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
39-9000	Other Personal Care and Service Workers	26,501	36,655	10,154	38.3	1,015	660	1,675	n/a	n/a
39-9011	Child Care Workers	17,626	24,612	6,986	39.6	699	480	1,179	7.67	11
39-9021	Personal and Home Care Aides	2,916	4,005	1,089	37.3	109	47	156	7.76	11
39-9031	Fitness Trainers and Aerobics Instructors	1,009	1,562	553	54.8	55	23	78	11.99	7
39-9032	Recreation Workers	3,085	4,046	961	31.2	96	71	167	9.99	5
39-9041	Residential Advisors	1,151	1,573	422	36.7	42	24	66	9.91	10
39-9099	Personal Care and Service Workers, Other	714	857	143	20.0	14	15	29	9.68	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Sales & Related Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
<b>41-0000</b>	<b>Sales and Related Occupations</b>	<b>192,413</b>	<b>228,364</b>	<b>35,951</b>	<b>18.7</b>	<b>3,595</b>	<b>6,413</b>	<b>10,008</b>	<b>n/a</b>	<b>n/a</b>
<b>41-1000</b>	<b>Supervisors, Sales Workers</b>	<b>29,066</b>	<b>35,777</b>	<b>6,711</b>	<b>23.1</b>	<b>671</b>	<b>527</b>	<b>1,198</b>	<b>n/a</b>	<b>n/a</b>
41-1011	Managers of Retail Sales Workers	23,673	28,724	5,051	21.3	505	425	930	15.19	8
41-1012	Managers of Non-Retail Sales Workers	5,393	7,053	1,660	30.8	166	102	268	25.95	8
<b>41-2000</b>	<b>Retail Sales Workers</b>	<b>115,030</b>	<b>131,468</b>	<b>16,438</b>	<b>14.3</b>	<b>1,644</b>	<b>4,788</b>	<b>6,432</b>	<b>n/a</b>	<b>n/a</b>
41-2011	Cashiers	50,552	60,165	9,613	19.0	961	2,460	3,421	7.50	11
41-2021	Counter and Rental Clerks	6,120	7,493	1,373	22.4	137	234	371	8.80	11
41-2022	Parts Salespersons	3,522	3,423	-99	-2.8	0	101	101	11.95	10
41-2031	Retail Salespersons	54,820	60,366	5,546	10.1	555	1,993	2,548	10.03	11
<b>41-3000</b>	<b>Sales Representatives, Services</b>	<b>8,493</b>	<b>10,208</b>	<b>1,715</b>	<b>20.2</b>	<b>172</b>	<b>162</b>	<b>334</b>	<b>n/a</b>	<b>n/a</b>
41-3011	Advertising Sales Agents	1,623	1,989	366	22.6	37	32	69	17.31	10
41-3021	Insurance Sales Agents	3,637	4,372	735	20.2	74	87	161	23.45	5
41-3031	Securities, Commodities & Financial Serv. Sales	2,622	3,258	636	24.3	64	30	94	27.04	5
41-3041	Travel Agents	611	589	-22	-3.6	0	14	14	11.81	7
<b>41-4000</b>	<b>Sales Reps., Wholesale and Manufacturing</b>	<b>22,580</b>	<b>29,014</b>	<b>6,434</b>	<b>28.5</b>	<b>643</b>	<b>593</b>	<b>1,236</b>	<b>n/a</b>	<b>n/a</b>
41-4011	Sales Reps., Wholesale & Manuf., Technical & Sci.	5,884	7,433	1,549	26.3	155	155	310	33.46	10
41-4012	Sales Reps., Wholesale & Manuf., Ex. Tech. & Sci.	16,696	21,581	4,885	29.3	489	438	927	23.34	10
<b>41-9000</b>	<b>Other Sales and Related Workers</b>	<b>17,244</b>	<b>21,897</b>	<b>4,653</b>	<b>27.0</b>	<b>465</b>	<b>343</b>	<b>808</b>	<b>n/a</b>	<b>n/a</b>
41-9011	Demonstrators and Product Promoters	1,412	1,907	495	35.1	50	31	81	13.14	10
41-9012	Models	*	*	*	*	*	*	*	n/a	10
41-9021	Real Estate Brokers	*	*	*	*	*	*	*	15.01	8
41-9022	Real Estate Sales Agents	4,262	5,992	1,730	40.6	173	85	258	14.99	7
41-9031	Sales Engineers	366	427	61	16.7	6	11	17	28.93	5
41-9041	Telemarketers	3,287	3,405	118	3.6	12	54	66	10.22	11
41-9091	Door-to-Door Sales, News, Street Vend. & Related	2,474	3,087	613	24.8	61	58	119	16.08	11
41-9099	Sales and Related Workers, All Other	5,070	6,546	1,476	29.1	148	97	245	19.20	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide

## Office & Administrative Support Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>43-0000 Office and Administrative Support Occupations</b>		<b>293,258</b>	<b>320,242</b>	<b>26,984</b>	<b>9.2</b>	<b>2,698</b>	<b>6,776</b>	<b>9,474</b>	<b>n/a</b>	<b>n/a</b>
<b>43-1000 Supervisors, Office &amp; Admin. Support Workers</b>		<b>17,999</b>	<b>19,448</b>	<b>1,449</b>	<b>8.1</b>	<b>145</b>	<b>386</b>	<b>531</b>	<b>n/a</b>	<b>n/a</b>
43-1011	Managers of Office & Admin. Support Workers	17,999	19,448	1,449	8.1	145	386	531	17.75	8
<b>43-2000 Communications Equipment Operators</b>		<b>3,238</b>	<b>2,955</b>	<b>-283</b>	<b>-8.7</b>	<b>0</b>	<b>83</b>	<b>83</b>	<b>n/a</b>	<b>n/a</b>
43-2011	Switchboard Operators, Inc. Answering Service	2,609	2,604	-5	-0.2	0	67	67	10.00	11
43-2021	Telephone Operators	*	*	*	*	*	*	*	11.88	11
43-2099	Communications Equipment Operators, Other	*	*	*	*	*	*	*	n/a	11
<b>43-3000 Financial Clerks</b>		<b>51,898</b>	<b>57,555</b>	<b>5,657</b>	<b>10.9</b>	<b>566</b>	<b>1,232</b>	<b>1,798</b>	<b>n/a</b>	<b>n/a</b>
43-3011	Bill and Account Collectors	5,378	7,080	1,702	31.6	170	101	271	12.23	11
43-3021	Billing and Posting Clerks and Machine Operators	10,433	11,471	1,038	9.9	104	177	281	12.17	10
43-3031	Bookkeeping, Accounting, and Auditing Clerks	23,963	25,627	1,664	6.9	166	449	615	12.51	10
43-3051	Payroll and Timekeeping Clerks	2,975	3,128	153	5.1	15	79	94	13.08	10
43-3061	Procurement Clerks	1,021	919	-102	-10.0	0	26	26	14.22	11
43-3071	Tellers	8,128	9,330	1,202	14.8	120	400	520	9.68	11
<b>43-4000 Information and Record Clerks</b>		<b>68,129</b>	<b>80,360</b>	<b>12,231</b>	<b>18.0</b>	<b>1,223</b>	<b>1,442</b>	<b>2,665</b>	<b>n/a</b>	<b>n/a</b>
43-4011	Brokerage Clerks	*	*	*	*	*	*	*	13.91	10
43-4021	Correspondence Clerks	*	*	*	*	*	*	*	13.35	11
43-4031	Court, Municipal, and License Clerks	3,292	3,955	663	20.1	66	73	139	12.72	11
43-4041	Credit Authorizers, Checkers, and Clerks	585	603	18	3.1	2	11	13	13.80	11
43-4051	Customer Service Representatives	23,667	30,253	6,586	27.8	659	352	1,011	12.24	10
43-4061	Eligibility Interviewers, Government Programs	472	436	-36	-7.6	0	13	13	17.67	10
43-4071	File Clerks	2,898	2,929	31	1.1	3	86	89	9.83	11
43-4081	Hotel, Motel, and Resort Desk Clerks	2,509	2,789	280	11.2	28	113	141	7.85	11
43-4111	Interviewers, Except Eligibility and Loan	3,078	3,743	665	21.6	67	80	147	10.41	11
43-4121	Library Assistants, Clerical	963	1,232	269	27.9	27	39	66	8.72	11
43-4131	Loan Interviewers and Clerks	2,354	2,071	-283	-12.0	0	32	32	11.78	11
43-4141	New Accounts Clerks	714	827	113	15.8	11	18	29	12.24	8
43-4151	Order Clerks	4,248	4,091	-157	-3.7	0	96	96	12.06	11
43-4161	Human Res. Assist., Ex. Payroll & Timekeeping	1,820	2,105	285	15.7	29	39	68	14.41	11
43-4171	Receptionists and Information Clerks	14,388	18,482	4,094	28.5	409	354	763	9.73	11
43-4181	Reservation, Transp. Ticket Agents & Travel Clerks	2,396	2,529	133	5.6	13	63	76	14.77	11
43-4999	Financial, Information & Record Clerks, Other	3,836	3,517	-319	-8.3	0	60	60	14.12	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Office & Administrative Support Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002	2012	2002-2012		Average Annual 2002-2012				
		Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
43-5000	Material Record, Dispatch & Distribute Workers	55,125	57,801	2,676	4.9	268	1,636	1,904	n/a	n/a
43-5011	Cargo and Freight Agents	*	*	*	*	*	*	*	15.21	10
43-5021	Couriers and Messengers	2,627	2,764	137	5.2	14	60	74	9.29	11
43-5031	Police, Fire, and Ambulance Dispatchers	1,432	1,754	322	22.5	32	31	63	11.30	10
43-5032	Dispatchers, Except Police, Fire, and Ambulance	2,313	2,613	300	13.0	30	50	80	14.36	10
43-5041	Meter Readers, Utilities	813	709	-104	-12.8	0	26	26	12.87	11
43-5051	Postal Service Clerks	1,024	1,148	124	12.1	12	27	39	18.99	11
43-5052	Postal Service Mail Carriers	4,573	5,129	556	12.2	56	143	199	19.05	11
43-5053	Postal Service Mail Sorters, Processors	2,398	2,421	23	1.0	2	63	65	16.84	11
43-5061	Production, Planning, and Expediting Clerks	3,779	4,328	549	14.5	55	92	147	16.56	11
43-5071	Shipping, Receiving, and Traffic Clerks	10,309	11,019	710	6.9	71	212	283	12.14	11
43-5081	Stock Clerks and Order Fillers	23,841	23,699	-142	-0.6	0	882	882	10.01	11
43-5111	Weigher, Measurer, Checker & Sampler, Records	1,140	1,370	230	20.2	23	29	52	12.08	11
43-5199	Material Record, Dispatch & Dist. Workers, Other	*	*	*	*	*	*	*	12.45	11
43-6000	Secretaries and Administrative Assistants	53,151	55,067	1,916	3.6	192	1,018	1,210	n/a	n/a
43-6011	Executive Secretaries & Administrative Assistants	21,072	22,798	1,726	8.2	173	404	577	15.11	10
43-6012	Legal Secretaries	2,175	2,623	448	20.6	45	42	87	14.69	7
43-6013	Medical Secretaries	4,315	4,735	420	9.7	42	83	125	11.25	7
43-6014	Secretaries, Except Legal, Medical, and Executive	25,589	24,911	-678	-2.6	0	490	490	10.99	10
43-9000	Other Office and Administrative Support Workers	43,718	47,056	3,338	7.6	334	978	1,312	n/a	n/a
43-9011	Computer Operators	1,230	1,042	-188	-15.3	0	26	26	15.15	10
43-9021	Data Entry Keyers	5,454	6,541	1,087	19.9	109	129	238	10.01	10
43-9022	Word Processors and Typists	973	622	-351	-36.1	0	21	21	12.34	10
43-9031	Desktop Publishers	432	608	176	40.7	18	10	28	14.32	7
43-9041	Insurance Claims and Policy Processing Clerks	1,683	1,742	59	3.5	6	27	33	15.13	10
43-9051	Mail Clerks & Mail Machine Ops., Ex. Postal Service	1,817	1,957	140	7.7	14	54	68	10.98	11
43-9061	Office Clerks, General	28,133	30,628	2,495	8.9	250	623	873	10.47	11
43-9071	Office Machine Operators, Except Computer	835	864	29	3.5	3	21	24	10.94	11
43-9081	Proofreaders and Copy Markers	321	284	-37	-11.5	0	7	7	11.30	11
43-9111	Statistical Assistants	*	*	*	*	*	*	*	23.75	10
43-9999	Secretaries, Admin. Assist. & Other Office Support	*	*	*	*	*	*	*	13.37	11

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Farming, Fishing, & Forestry Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total	2003	Req'd~
45-0000	Farming, Fishing, and Forestry Occupations	7,548	8,872	1,324	17.5	132	196	328	n/a	n/a
45-1000	Supervisors, Farming, Fishing & Forestry Workers	531	665	134	25.2	13	12	25	n/a	n/a
45-1011	Managers of Farming, Fishing & Forestry Workers	531	665	134	25.2	13	12	25	17.46	8
45-2000	Agricultural Workers	5,318	6,071	753	14.2	75	145	220	n/a	n/a
45-2011	Agricultural Inspectors	*	*	*	*	*	*	*	n/a	8
45-2021	Animal Breeders	*	*	*	*	*	*	*	10.25	10
45-2041	Graders and Sorters, Agricultural Products	409	424	15	3.7	2	11	13	9.70	8
45-2091	Agricultural Equipment Operators	363	414	51	14.0	5	10	15	12.42	10
45-2092	Farmworkers & Laborers, Crop, Nursery	430	462	32	7.4	3	12	15	9.63	11
45-2093	Farmworkers, Farm and Ranch Animals	3,606	4,220	614	17.0	61	102	163	9.07	11
45-3000	Fishing and Hunting Workers	275	377	102	37.1	10	9	19	n/a	n/a
45-3011	Fishers and Related Fishing Workers	*	*	*	*	*	*	*	n/a	10
45-3021	Hunters and Trappers	*	*	*	*	*	*	*	n/a	10
45-4000	Forest, Conservation, and Logging Workers	868	1,111	243	28.0	24	16	40	n/a	n/a
45-4011	Forest and Conservation Workers	*	*	*	*	*	*	*	n/a	10
45-4021	Fallers	*	*	*	*	*	*	*	11.55	10
45-4022	Logging Equipment Operators	391	490	99	25.3	10	7	17	10.64	10
45-4023	Log Graders and Scalers	274	371	97	35.4	10	5	15	14.33	10
45-9000	Other Farming, Fishing, and Forestry Workers	556	648	92	16.5	9	13	22	n/a	n/a
45-9099	Farming, Fishing & Forestry Workers, Other	556	648	92	16.5	9	13	22	9.77	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Construction & Extraction Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>47-0000</b>	<b>Construction and Extraction Occupations</b>	<b>98,485</b>	<b>114,653</b>	<b>16,168</b>	<b>16.4</b>	<b>1,617</b>	<b>2,013</b>	<b>3,630</b>	<b>n/a</b>	<b>n/a</b>
<b>47-1000</b>	<b>Supervisors, Construction and Extraction Workers</b>	<b>10,420</b>	<b>12,214</b>	<b>1,794</b>	<b>17.2</b>	<b>179</b>	<b>177</b>	<b>356</b>	<b>n/a</b>	<b>n/a</b>
47-1011	Managers of Const. Trades & Extraction Workers	10,420	12,214	1,794	17.2	179	177	356	22.89	8
<b>47-2000</b>	<b>Construction Trades Workers</b>	<b>71,254</b>	<b>85,084</b>	<b>13,830</b>	<b>19.4</b>	<b>1,383</b>	<b>1,360</b>	<b>2,743</b>	<b>n/a</b>	<b>n/a</b>
47-2011	Boilermakers	*	*	*	*	*	*	*	n/a	9
47-2021	Brickmasons and Blockmasons	1,911	2,419	508	26.6	51	28	79	17.25	9
47-2022	Stonemasons	*	*	*	*	*	*	*	12.59	9
47-2031	Carpenters	11,598	14,148	2,550	22.0	255	189	444	15.55	9
47-2041	Carpet Installers	561	757	196	34.9	20	9	29	13.96	10
47-2042	Floor Layers, Except Carpet, Wood & Hard Tiles	244	337	93	38.1	9	4	13	15.90	10
47-2043	Floor Sanders and Finishers	*	*	*	*	*	*	*	13.07	10
47-2044	Tile and Marble Setters	185	231	46	24.9	5	3	8	21.22	9
47-2051	Cement Masons and Concrete Finishers	2,018	2,615	597	29.6	60	41	101	14.06	10
47-2053	Terrazzo Workers and Finishers	*	*	*	*	*	*	*	n/a	9
47-2061	Construction Laborers	13,819	16,515	2,696	19.5	270	184	454	11.86	10
47-2071	Paving, Surfacing & Tamping Equipment Operators	1,029	1,235	206	20.0	21	15	36	13.47	10
47-2072	Pile-Driver Operators	*	*	*	*	*	*	*	20.09	10
47-2073	Operating Engineers & Other Const. Equip. Ops.	10,904	11,839	935	8.6	94	280	374	15.85	10
47-2081	Drywall and Ceiling Tile Installers	1,097	1,419	322	29.4	32	24	56	17.09	10
47-2082	Tapers	286	371	85	29.7	9	6	15	16.48	10
47-2111	Electricians	8,400	9,863	1,463	17.4	146	166	312	19.61	9
47-2121	Glaziers	512	618	106	20.7	11	11	22	14.02	9
47-2130	Insulation Workers	379	447	68	17.9	7	11	18	15.73	10
47-2141	Painters, Construction and Maintenance	3,982	5,136	1,154	29.0	115	61	176	13.25	10
47-2142	Paperhangers	186	254	68	36.6	7	2	9	15.12	10
47-2151	Pipelayers	603	733	130	21.6	13	14	27	15.24	10
47-2152	Plumbers, Pipefitters, and Steamfitters	6,607	7,813	1,206	18.3	121	152	273	20.67	9
47-2161	Plasterers and Stucco Masons	*	*	*	*	*	*	*	n/a	9
47-2171	Reinforcing Iron and Rebar Workers	*	*	*	*	*	*	*	20.90	9
47-2181	Roofers	1,648	2,181	533	32.3	53	38	91	14.18	10
47-2211	Sheet Metal Workers	2,660	3,182	522	19.6	52	64	116	16.18	10
47-2221	Structural Iron and Steel Workers	997	1,176	179	18.0	18	20	38	19.17	9

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Construction & Extraction Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
47-3000	Helpers, Construction Trades	5,803	6,366	563	9.7	56	241	297	n/a	n/a
47-3011	Helpers--Brick, Block, Stone, Tile & Marble Setters	754	772	18	2.4	2	31	33	12.67	11
47-3012	Helpers--Carpenters	1,171	1,349	178	15.2	18	49	67	9.72	11
47-3013	Helpers--Electricians	1,490	1,660	170	11.4	17	62	79	10.99	11
47-3014	Helpers--Painter, Paperhanger, Plasterer & Stucco	100	117	17	17.0	2	4	6	9.57	11
47-3015	Helpers--Pipelayer & fitter, Plumber & Steamfitter	1,639	1,722	83	5.1	8	68	76	11.60	11
47-3016	Helpers--Roofers	337	400	63	18.7	6	14	20	9.50	11
47-3019	Helpers, Construction Trades, Other	312	346	34	10.9	3	13	16	11.24	11
47-4000	Other Construction and Related Workers	5,622	6,655	1,033	18.4	103	99	202	n/a	n/a
47-4011	Construction and Building Inspectors	866	1,078	212	24.5	21	20	41	18.86	8
47-4021	Elevator Installers and Repairers	112	125	13	11.6	1	3	4	20.31	9
47-4031	Fence Erectors	*	*	*	*	*	*	*	13.28	10
47-4041	Hazardous Materials Removal Workers	417	542	125	30.0	13	11	24	15.64	10
47-4051	Highway Maintenance Workers	3,098	3,649	551	17.8	55	45	100	10.67	10
47-4061	Rail-Track Laying & Maintenance Equip. Operators	236	178	-58	-24.6	0	5	5	18.73	10
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	166	194	28	16.9	3	4	7	12.54	10
47-4091	Segmental Pavers	*	*	*	*	*	*	*	n/a	10
47-4999	Construction Trades & Related Workers, Other	*	*	*	*	*	*	*	15.10	10
47-5000	Extraction Workers	4,951	3,814	-1,137	-23.0	0	128	128	n/a	n/a
47-5011	Derrick Operators, Oil and Gas	*	*	*	*	*	*	*	n/a	10
47-5012	Rotary Drill Operators, Oil and Gas	146	121	-25	-17.1	0	4	4	10.31	10
47-5013	Service Unit Operators, Oil, Gas, and Mining	122	113	-9	-7.4	0	4	4	13.03	10
47-5021	Earth Drillers, Except Oil and Gas	393	403	10	2.5	1	8	9	14.35	10
47-5031	Explosives Workers, Ordnance Handling & Blasters	390	356	-34	-8.7	0	15	15	16.35	10
47-5041	Continuous Mining Machine Operators	920	658	-262	-28.5	0	26	26	17.62	10
47-5042	Mine Cutting and Channeling Machine Operators	164	128	-36	-22.0	0	5	5	18.42	10
47-5049	Mining Machine Operators, All Other	*	*	*	*	*	*	*	16.96	10
47-5051	Rock Splitters, Quarry	*	*	*	*	*	*	*	n/a	10
47-5061	Roof Bolters, Mining	1,144	783	-361	-31.6	0	21	21	17.26	10
47-5071	Roustabouts, Oil and Gas	112	95	-17	-15.2	0	3	3	12.87	10
47-5081	Helpers--Extraction Workers	1,157	879	-278	-24.0	0	33	33	14.63	11
47-5099	Extraction Workers, Other	284	193	-91	-32.0	0	7	7	15.71	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Installation, Maintenance, & Repair Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>49-0000</b>	<b>Installation, Maintenance, and Repair Occupations</b>	<b>83,810</b>	<b>96,646</b>	<b>12,836</b>	<b>15.3</b>	<b>1,284</b>	<b>1,851</b>	<b>3,135</b>	<b>n/a</b>	<b>n/a</b>
<b>49-1000</b>	<b>Supervisors of Installation, Maint., Repair Workers</b>	<b>7,612</b>	<b>8,653</b>	<b>1,041</b>	<b>13.7</b>	<b>104</b>	<b>191</b>	<b>295</b>	<b>n/a</b>	<b>n/a</b>
49-1011	Managers of Mechanics, Installers, and Repairers	7,612	8,653	1,041	13.7	104	191	295	22.29	8
<b>49-2000</b>	<b>Electrical &amp; Electronic Equip. Mechanic, Install.</b>	<b>7,620</b>	<b>8,672</b>	<b>1,052</b>	<b>13.8</b>	<b>105</b>	<b>145</b>	<b>250</b>	<b>n/a</b>	<b>n/a</b>
49-2011	Computer, Auto. Teller & Office Machine Repairers	1,905	2,140	235	12.3	24	23	47	15.39	7
49-2021	Radio Mechanics	*	*	*	*	*	*	*	16.34	7
49-2022	Telecommunications Equip. Install. & Repair.	1,716	2,093	377	22.0	38	36	74	20.00	9
49-2091	Avionics Technicians	*	*	*	*	*	*	*	n/a	7
49-2092	Electric Motor, Power Tool, and Related Repairers	472	508	36	7.6	4	11	15	14.72	7
49-2093	Elec. & Electronic Install. & Repair., Transp. Equip.	*	*	*	*	*	*	*	n/a	7
49-2094	Elec. & Electronic Repair-Commerc., Indust. Equip.	1,130	1,274	144	12.7	14	25	39	21.33	7
49-2095	Elec. & Electronic Repair-Pwrhouse, Subst., Relay	146	147	1	0.7	0	3	3	22.09	7
49-2096	Electronic Equip. Install. & Repair., Motor Vehicles	*	*	*	*	*	*	*	n/a	7
49-2097	Electronic Home Entertain. Equip. Install. & Repair.	544	650	106	19.5	11	11	22	12.05	7
49-2098	Security and Fire Alarm Systems Installers	*	*	*	*	*	*	*	13.20	7
49-2099	Elec. & Electronic Equip. Mech.-Install/Repair, Other	*	*	*	*	*	*	*	n/a	7
<b>49-3000</b>	<b>Vehicle &amp; Mobile Equipment Mechanics, Installers</b>	<b>24,476</b>	<b>28,587</b>	<b>4,111</b>	<b>16.8</b>	<b>411</b>	<b>631</b>	<b>1,042</b>	<b>n/a</b>	<b>n/a</b>
49-3011	Aircraft Mechanics and Service Technicians	1,015	1,160	145	14.3	15	24	39	23.63	7
49-3021	Automotive Body and Related Repairers	2,317	2,709	392	16.9	39	47	86	17.10	9
49-3022	Automotive Glass Installers and Repairers	240	275	35	14.6	4	5	9	14.28	9
49-3023	Automotive Service Technicians and Mechanics	10,492	12,517	2,025	19.3	203	279	482	13.14	7
49-3031	Bus & Truck Mech. & Diesel Engine Specialists	4,116	4,795	679	16.5	68	106	174	15.00	7
49-3041	Farm Equipment Mechanics	504	567	63	12.5	6	11	17	11.54	7
49-3042	Mobile Heavy Equip. Mechanics, Ex. Engines	2,553	2,821	268	10.5	27	55	82	16.74	7
49-3043	Rail Car Repairers	*	*	*	*	*	*	*	n/a	9
49-3051	Motorboat Mechanics	*	*	*	*	*	*	*	14.74	9
49-3052	Motorcycle Mechanics	278	398	120	43.2	12	7	19	9.97	9
49-3053	Outdoor Power Equip. & Other Small Engine Mech.	580	734	154	26.6	15	14	29	10.05	10
49-3091	Bicycle Repairers	*	*	*	*	*	*	*	n/a	10
49-3092	Recreational Vehicle Service Technicians	*	*	*	*	*	*	*	13.55	9
49-3093	Tire Repairers and Changers	1,289	1,400	111	8.6	11	55	66	10.02	11
49-3099	Vehicle & Mobile Equip. Mech., Install/Repair, Other	*	*	*	*	*	*	*	n/a	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide

## Installation, Maintenance, & Repair Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total	2003	Req'd~
49-9000	Other Install., Maint. & Repair Occupations	44,102	50,734	6,632	15.0	663	884	1,547	n/a	n/a
49-9011	Mechanical Door Repairers	*	*	*	*	*	*	*	12.83	10
49-9012	Control & Valve Install. & Repair., Ex. Mech. Door	851	1,022	171	20.1	17	21	38	17.66	10
49-9021	Heating, Air Cond. & Refrigeration Mech. & Install.	2,807	3,779	972	34.6	97	37	134	15.98	9
49-9031	Home Appliance Repairers	354	376	22	6.2	2	8	10	13.73	9
49-9041	Industrial Machinery Mechanics	5,187	5,494	307	5.9	31	105	136	19.11	9
49-9042	Maintenance and Repair Workers, General	21,852	25,591	3,739	17.1	374	420	794	14.89	10
49-9043	Maintenance Workers, Machinery	1,494	1,360	-134	-9.0	0	34	34	15.92	11
49-9044	Millwrights	1,165	1,333	168	14.4	17	28	45	21.40	9
49-9045	Refractory Materials Repairers, Ex. Brickmasons	*	*	*	*	*	*	*	19.40	10
49-9051	Electrical Power-Line Installers and Repairers	2,041	1,988	-53	-2.6	0	65	65	21.38	9
49-9052	Telecommunications Line Installers and Repairers	1,624	2,304	680	41.9	68	44	112	15.66	9
49-9061	Camera and Photographic Equipment Repairers	*	*	*	*	*	*	*	13.07	10
49-9062	Medical Equipment Repairers	671	832	161	24.0	16	19	35	18.41	6
49-9063	Musical Instrument Repairers and Tuners	106	118	12	11.3	1	3	4	15.20	9
49-9064	Watch Repairers	*	*	*	*	*	*	*	13.21	9
49-9069	Precision Instrument & Equip. Repairers, Other	268	299	31	11.6	3	8	11	23.74	9
49-9091	Coin, Vending & Amusement Mach. Serv. & Repair.	543	665	122	22.5	12	13	25	13.02	10
49-9092	Commercial Divers	*	*	*	*	*	*	*	n/a	10
49-9093	Fabric Menders, Except Garment	*	*	*	*	*	*	*	n/a	10
49-9094	Locksmiths and Safe Repairers	218	232	14	6.4	1	7	8	14.56	10
49-9095	Manufactured Building and Mobile Home Installers	605	707	102	16.9	10	15	25	12.10	10
49-9096	Riggers	*	*	*	*	*	*	*	19.42	11
49-9097	Signal and Track Switch Repairers	*	*	*	*	*	*	*	n/a	10
49-9098	Helpers--Installation, Maint. & Repair Workers	1,912	2,163	251	13.1	25	65	90	11.40	11
49-9099	Installation, Maintenance & Repair Workers, Other	1,954	2,036	82	4.2	8	44	52	18.57	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Production Occupations

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>51-0000 Production Occupations</b>		<b>207,662</b>	<b>217,604</b>	<b>9,942</b>	<b>4.8</b>	<b>994</b>	<b>4,966</b>	<b>5,960</b>	<b>n/a</b>	<b>n/a</b>
<b>51-1000 Supervisors, Production Workers</b>		<b>13,126</b>	<b>14,987</b>	<b>1,861</b>	<b>14.2</b>	<b>186</b>	<b>275</b>	<b>461</b>	<b>n/a</b>	<b>n/a</b>
51-1011	Managers of Production and Operating Workers	13,126	14,987	1,861	14.2	186	275	461	21.31	8
<b>51-2000 Assemblers and Fabricators</b>		<b>47,235</b>	<b>46,243</b>	<b>-992</b>	<b>-2.1</b>	<b>0</b>	<b>1,209</b>	<b>1,209</b>	<b>n/a</b>	<b>n/a</b>
51-2011	Aircraft Structure, Surface, Rig. & Systems Assemb.	*	*	*	*	*	*	*	12.71	9
51-2021	Coil Winders, Tapers, and Finishers	662	518	-144	-21.8	0	16	16	10.56	11
51-2022	Electrical and Electronic Equipment Assemblers	3,428	2,937	-491	-14.3	0	81	81	12.81	11
51-2023	Electromechanical Equipment Assemblers	*	*	*	*	*	*	*	n/a	11
51-2031	Engine and Other Machine Assemblers	854	881	27	3.2	3	24	27	12.13	11
51-2041	Structural Metal Fabricators and Fitters	1,595	1,721	126	7.9	13	38	51	13.61	10
51-2091	Fiberglass Laminators and Fabricators	327	365	38	11.6	4	9	13	12.03	10
51-2092	Team Assemblers	30,100	29,909	-191	-0.6	0	778	778	16.25	10
51-2093	Timing Device Assemb., Adjusters & Calibrators	*	*	*	*	*	*	*	n/a	10
51-2099	Assemblers and Fabricators, Other	9,512	9,303	-209	-2.2	0	246	246	12.77	10
<b>51-3000 Food Processing Workers</b>		<b>10,646</b>	<b>11,988</b>	<b>1,342</b>	<b>12.6</b>	<b>134</b>	<b>244</b>	<b>378</b>	<b>n/a</b>	<b>n/a</b>
51-3011	Bakers	1,471	1,689	218	14.8	22	34	56	9.52	9
51-3021	Butchers and Meat Cutters	1,869	1,889	20	1.1	2	41	43	11.68	9
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	2,642	3,106	464	17.6	46	58	104	9.17	11
51-3023	Slaughterers and Meat Packers	1,937	2,279	342	17.7	34	43	77	10.78	10
51-3091	Food & Tobacco Roast, Bake, Drying Machine Ops.	*	*	*	*	*	*	*	12.47	11
51-3092	Food Batchmakers	1,033	1,200	167	16.2	17	26	43	12.22	11
51-3093	Food Cooking Machine Operators and Tenders	741	824	83	11.2	8	17	25	11.24	11
51-3099	Food Processing Workers, Other	*	*	*	*	*	*	*	n/a	11
<b>51-4000 Metal Workers and Plastic Workers</b>		<b>49,545</b>	<b>54,774</b>	<b>5,229</b>	<b>10.6</b>	<b>523</b>	<b>1,226</b>	<b>1,749</b>	<b>n/a</b>	<b>n/a</b>
51-4011	Computer-Controlled Machine Tool Ops	2,975	3,277	302	10.2	30	49	79	13.61	10
51-4012	Numerical Tool & Process Control Programmers	390	479	89	22.8	9	6	15	17.36	9
51-4021	Extruding & Drawing Mach. Setters, Ops. & Tenders	2,906	3,049	143	4.9	14	97	111	13.76	10
51-4022	Forging Machine Setters, Operators & Tenders	688	743	55	8.0	6	10	16	12.62	10
51-4023	Rolling Machine Setters, Operators & Tenders	1,022	1,057	35	3.4	4	23	27	13.91	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch



# Kentucky Statewide

## Production Occupations (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
51-4031	Cut, Punch. & Press Mach.-Setter, Operator, Tender	6,955	7,672	717	10.3	72	161	233	11.63	10
51-4032	Drill & Boring Mach. Tool Setter, Operator & Tender	1,490	1,640	150	10.1	15	44	59	13.48	10
51-4033	Grind, Lap, Polish & Buff Mach. Tool Setters, Ops.	1,763	1,823	60	3.4	6	34	40	12.93	10
51-4034	Lathe & Turning Mach. Tool Setters, Operators	717	734	17	2.4	2	14	16	14.38	10
51-4035	Milling & Planing Machine Setters, Operators	349	328	-21	-6.0	0	6	6	13.51	10
51-4041	Machinists	5,243	5,907	664	12.7	66	122	188	15.69	9
51-4051	Metal-Refining Furnace Operators and Tenders	821	778	-43	-5.2	0	18	18	15.83	10
51-4052	Pourers and Casters, Metal	327	306	-21	-6.4	0	7	7	15.11	10
51-4061	Model Makers, Metal and Plastic	*	*	*	*	*	*	*	n/a	10
51-4062	Patternmakers, Metal and Plastic	*	*	*	*	*	*	*	15.56	10
51-4071	Foundry Mold and Coremakers	*	*	*	*	*	*	*	n/a	10
51-4072	Molding, Coremaking, Casting Mach. Setters, Ops.	4,239	4,636	397	9.4	40	106	146	11.11	10
51-4081	Multiple Machine Tool Setters, Operators	5,496	6,411	915	16.6	92	151	243	16.66	10
51-4111	Tool and Die Makers	2,563	2,742	179	7.0	18	58	76	19.56	9
51-4121	Welders, Cutters, Solderers, and Brazers	6,607	7,935	1,328	20.1	133	187	320	14.27	9
51-4122	Welding, Soldering & Brazing Mach. Setters, Ops.	1,690	1,816	126	7.5	13	48	61	13.47	10
51-4191	Heat Treating Equip. Setters, Operators & Tenders	666	692	26	3.9	3	21	24	14.22	10
51-4192	Lay-Out Workers, Metal and Plastic	106	121	15	14.2	2	2	4	14.49	10
51-4193	Plating & Coating Mach. Setter, Operator & Tender	621	642	21	3.4	2	14	16	12.92	10
51-4194	Tool Grinders, Filers, and Sharpeners	310	313	3	1.0	0	10	10	15.57	10
51-4199	Metal Workers and Plastic Workers, All Other	1,290	1,340	50	3.9	5	31	36	14.93	10
<b>51-5000</b>	<b>Printing Workers</b>	<b>7,225</b>	<b>7,348</b>	<b>123</b>	<b>1.7</b>	<b>12</b>	<b>175</b>	<b>187</b>	<b>n/a</b>	<b>n/a</b>
51-5011	Bindery Workers	1,743	1,608	-135	-7.7	0	47	47	12.30	11
51-5012	Bookbinders	*	*	*	*	*	*	*	n/a	10
51-5021	Job Printers	616	724	108	17.5	11	14	25	13.63	9
51-5022	Prepress Technicians and Workers	1,430	1,343	-87	-6.1	0	34	34	14.11	9
51-5023	Printing Machine Operators	3,348	3,581	233	7.0	23	78	101	15.08	10
51-5099	Printing Workers, Other	*	*	*	*	*	*	*	n/a	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Production Occupations (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage	Educ/ Training
Code	Title	2002	2012	2002-2012		Average Annual 2002-2012				
		Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
51-6000	Textile, Apparel, and Furnishings Workers	18,074	15,147	-2,927	-16.2	0	306	306	n/a	n/a
51-6011	Laundry and Dry-Cleaning Workers	3,526	4,054	528	15.0	53	96	149	7.96	10
51-6021	Pressers, Textile, Garment, and Related Materials	1,479	1,547	68	4.6	7	23	30	8.55	11
51-6031	Sewing Machine Operators	9,904	6,931	-2,973	-30.0	0	123	123	9.72	10
51-6041	Shoe and Leather Workers and Repairers	*	*	*	*	*	*	*	10.24	9
51-6042	Shoe Machine Operators and Tenders	*	*	*	*	*	*	*	n/a	10
51-6051	Sewers, Hand	*	*	*	*	*	*	*	9.50	11
51-6052	Tailors, Dressmakers, and Custom Sewers	437	466	29	6.6	3	8	11	9.83	9
51-6061	Textile Bleaching & Dyeing Machine Operators	*	*	*	*	*	*	*	n/a	10
51-6062	Textile Cutting Machine Setters, Operators	594	440	-154	-25.9	0	13	13	11.65	10
51-6063	Textile Knitting & Weaving Mach. Setters, Operators	314	195	-119	-37.9	0	4	4	11.07	9
51-6064	Textile Winding, Twist., Drawing Out Mach. Setters	*	*	*	*	*	*	*	9.32	10
51-6091	Extruding & Forming Machine Setters, Operators	*	*	*	*	*	*	*	14.37	10
51-6092	Fabric and Apparel Patternmakers	136	52	-84	-61.8	0	6	6	14.06	9
51-6093	Upholsterers	574	569	-5	-0.9	0	15	15	11.56	9
51-6099	Textile, Apparel, and Furnishings Workers, Other	249	201	-48	-19.3	0	6	6	10.24	11
51-7000	Woodworkers	6,650	7,136	486	7.3	49	174	223	n/a	n/a
51-7011	Cabinetmakers and Bench Carpenters	2,126	2,414	288	13.5	29	53	82	11.43	9
51-7021	Furniture Finishers	403	422	19	4.7	2	8	10	11.84	9
51-7031	Model Makers, Wood	*	*	*	*	*	*	*	n/a	9
51-7032	Patternmakers, Wood	*	*	*	*	*	*	*	11.99	9
51-7041	Sawing Mach. Setters, Operators & Tenders, Wood	1,421	1,495	74	5.2	7	40	47	10.07	10
51-7042	Woodworking Mach. Setters, Operators & Tenders	2,321	2,405	84	3.6	8	61	69	10.87	10
51-7099	Woodworkers, All Other	224	240	16	7.1	2	7	9	9.87	10
51-8000	Plant and System Operators	5,142	5,380	238	4.6	24	156	180	n/a	n/a
51-8012	Power Distributors and Dispatchers	*	*	*	*	*	*	*	29.52	9
51-8013	Power Plant Operators	401	309	-92	-22.9	0	11	11	22.51	9
51-8021	Stationary Engineers and Boiler Operators	645	624	-21	-3.3	0	12	12	17.64	9
51-8031	Water & Liquid Waste Treat. Plant & System Ops.	1,944	2,388	444	22.8	44	67	111	14.40	9
51-8091	Chemical Plant and System Operators	1,316	1,280	-36	-2.7	0	41	41	22.01	9
51-8092	Gas Plant Operators	245	193	-52	-21.2	0	8	8	21.66	9
51-8093	Petroleum Pump System Ops., Refinery Ops.	*	*	*	*	*	*	*	n/a	9
51-8099	Plant and System Operators, All Other	232	212	-20	-8.6	0	7	7	16.55	9

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Production Occupations (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>51-9000</b>	<b>Other Production Occupations</b>	<b>50,019</b>	<b>54,601</b>	<b>4,582</b>	<b>9.2</b>	<b>458</b>	<b>1,203</b>	<b>1,661</b>	<b>n/a</b>	<b>n/a</b>
51-9011	Chemical Equipment Operators and Tenders	1,395	1,389	-6	-0.4	0	45	45	23.99	10
51-9012	Separate, Filter, Clarify, Precipitate, Still Mach. Set.	638	604	-34	-5.3	0	20	20	15.16	10
51-9021	Crush, Grind & Polish Mach. Setters, Operators	700	692	-8	-1.1	0	18	18	13.82	10
51-9022	Grinding and Polishing Workers, Hand	465	538	73	15.7	7	12	19	11.12	10
51-9023	Mixing & Blending Machine Setters, Operators	2,073	1,987	-86	-4.1	0	54	54	14.45	10
51-9031	Cutters and Trimmers, Hand	596	741	145	24.3	15	12	27	17.02	11
51-9032	Cutting & Slicing Machine Setters, Operators	1,674	1,704	30	1.8	3	35	38	14.64	10
51-9041	Extrude, Form, Press & Compact Machine Setters	1,321	1,341	20	1.5	2	35	37	14.85	10
51-9051	Furnace, Kiln, Oven, Drier & Kettle Operators	846	851	5	0.6	1	20	21	16.08	10
51-9061	Inspectors, Testers, Sorters, Samplers & Weighers	10,458	11,531	1,073	10.3	107	238	345	14.23	10
51-9071	Jewelers and Precious Stone and Metal Workers	265	283	18	6.8	2	5	7	15.46	7
51-9081	Dental Laboratory Technicians	750	792	42	5.6	4	16	20	13.28	9
51-9082	Medical Appliance Technicians	*	*	*	*	*	*	*	14.36	9
51-9083	Ophthalmic Laboratory Technicians	255	274	19	7.5	2	6	8	10.70	10
51-9111	Packaging & Filling Machine Operators & Tenders	7,694	8,833	1,139	14.8	114	153	267	12.08	11
51-9121	Coating, Painting & Spraying Machine Setters	2,331	2,792	461	19.8	46	61	107	13.14	10
51-9122	Painters, Transportation Equipment	1,760	2,342	582	33.1	58	46	104	20.12	10
51-9123	Painting, Coating, and Decorating Workers	385	448	63	16.4	6	10	16	12.77	11
51-9131	Photographic Process Workers	360	380	20	5.6	2	9	11	9.20	10
51-9132	Photographic Processing Machine Operators	704	767	63	8.9	6	17	23	8.88	11
51-9141	Semiconductor Processors	*	*	*	*	*	*	*	n/a	6
51-9191	Cementing & Gluing Machine Operators & Tenders	213	220	7	3.3	1	6	7	11.17	10
51-9192	Clean., Wash. & Metal Pickling Equip. Operators	519	597	78	15.0	8	15	23	11.33	10
51-9193	Cooling & Freezing Equip. Operators & Tenders	*	*	*	*	*	*	*	7.87	10
51-9194	Etchers and Engravers	*	*	*	*	*	*	*	11.23	9
51-9195	Molders, Shapers & Casters, Ex. Metal and Plastic	602	679	77	12.8	8	14	22	10.54	10
51-9196	Paper Goods Machine Setters, Operators	2,441	2,846	405	16.6	41	52	93	14.52	10
51-9197	Tire Builders	*	*	*	*	*	*	*	n/a	10
51-9198	Helpers--Production Workers	6,356	6,374	18	0.3	2	178	180	11.57	11
51-9199	Production Workers, Other	4,663	4,997	334	7.2	33	111	144	13.80	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Transportation & Material Moving Occs

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average	Educ/
		2002	2012	2002-2012		Average Annual 2002-2012			Wage	Training
Code	Title	Estimated	Projected	Number	Percent	Growth	Separations	Total	2003	Req'd~
<b>53-0000 Transportation and Material Moving Occupations</b>		<b>162,732</b>	<b>185,606</b>	<b>22,874</b>	<b>14.1</b>	<b>2,287</b>	<b>3,618</b>	<b>5,905</b>	<b>n/a</b>	<b>n/a</b>
<b>53-1000 Supervisors, Transp. &amp; Material Moving Workers</b>		<b>5,797</b>	<b>6,757</b>	<b>960</b>	<b>16.6</b>	<b>96</b>	<b>136</b>	<b>232</b>	<b>n/a</b>	<b>n/a</b>
53-1011	Aircraft Cargo Handling Supervisors	*	*	*	*	*	*	*	21.48	8
53-1021	Managers of Helpers, Laborers & Material Movers	*	*	*	*	*	*	*	17.63	8
53-1031	Managers of Transp., Material-Moving, Vehicle Ops.	3,217	3,702	485	15.1	49	76	125	20.28	8
<b>53-2000 Air Transportation Workers</b>		<b>2,719</b>	<b>3,096</b>	<b>377</b>	<b>13.9</b>	<b>38</b>	<b>72</b>	<b>110</b>	<b>n/a</b>	<b>n/a</b>
53-2011	Airline Pilots, Copilots, and Flight Engineers	*	*	*	*	*	*	*	n/a	5
53-2012	Commercial Pilots	150	165	15	10.0	2	4	6	n/a	7
53-2021	Air Traffic Controllers	324	321	-3	-0.9	0	8	8	43.65	9
53-2022	Airfield Operations Specialists	*	*	*	*	*	*	*	n/a	9
53-2099	Air Transportation Workers, Other	*	*	*	*	*	*	*	n/a	10
<b>53-3000 Motor Vehicle Operators</b>		<b>65,437</b>	<b>80,913</b>	<b>15,476</b>	<b>23.7</b>	<b>1,548</b>	<b>973</b>	<b>2,521</b>	<b>n/a</b>	<b>n/a</b>
53-3011	Ambulance Drivers & Attend., Ex. EMTs	*	*	*	*	*	*	*	9.93	10
53-3021	Bus Drivers, Transit and Intercity	1,239	1,466	227	18.3	23	27	50	11.65	10
53-3022	Bus Drivers, School	7,994	9,695	1,701	21.3	170	174	344	12.04	11
53-3031	Driver/Sales Workers	6,499	7,942	1,443	22.2	144	106	250	12.27	11
53-3032	Truck Drivers, Heavy and Tractor-Trailer	28,461	35,901	7,440	26.1	744	465	1,209	15.49	10
53-3033	Truck Drivers, Light or Delivery Services	18,440	22,531	4,091	22.2	409	169	578	11.63	11
53-3041	Taxi Drivers and Chauffeurs	1,515	1,856	341	22.5	34	14	48	8.52	11
53-3099	Motor Vehicle Operators, Other	*	*	*	*	*	*	*	9.95	11
<b>53-4000 Rail Transportation Workers</b>		<b>1,989</b>	<b>1,585</b>	<b>-404</b>	<b>-20.3</b>	<b>0</b>	<b>49</b>	<b>49</b>	<b>n/a</b>	<b>n/a</b>
53-4011	Locomotive Engineers	*	*	*	*	*	*	*	n/a	8
53-4012	Locomotive Firers	*	*	*	*	*	*	*	n/a	8
53-4013	Rail Yard Engineers, Dinkey Operators & Hostlers	*	*	*	*	*	*	*	18.61	8
53-4021	Railroad Brake, Signal, and Switch Operators	400	276	-124	-31.0	0	4	4	23.94	8
53-4031	Railroad Conductors and Yardmasters	*	*	*	*	*	*	*	n/a	8
53-4099	Rail Transportation Workers, Other	*	*	*	*	*	*	*	n/a	10
<b>53-5000 Water Transportation Workers</b>		<b>1,965</b>	<b>2,139</b>	<b>174</b>	<b>8.9</b>	<b>17</b>	<b>66</b>	<b>83</b>	<b>n/a</b>	<b>n/a</b>
53-5011	Sailors and Marine Oilers	1,145	1,279	134	11.7	13	40	53	15.49	11
53-5021	Captains, Mates, and Pilots of Water Vessels	599	643	44	7.3	4	17	21	39.40	8
53-5022	Motorboat Operators	*	*	*	*	*	*	*	n/a	10
53-5031	Ship Engineers	*	*	*	*	*	*	*	29.63	7

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

# Kentucky Statewide

## Transportation & Material Moving Occs (cont'd)

### Occupational Employment Outlook and Job Openings

Occupational		Employment*		Change		Job Openings			Average Wage 2003	Educ/ Training Req'd~
Code	Title	2002 Estimated	2012 Projected	2002-2012 Number	2002-2012 Percent	Average Annual 2002-2012				
						Growth	Separations	Total		
53-6000	Other Transportation Workers	3,581	4,064	483	13.5	48	130	178	n/a	n/a
53-6011	Bridge and Lock Tenders	*	*	*	*	*	*	*	18.83	11
53-6021	Parking Lot Attendants	516	592	76	14.7	8	15	23	8.13	11
53-6031	Service Station Attendants	1,603	1,863	260	16.2	26	72	98	7.38	11
53-6041	Traffic Technicians	*	*	*	*	*	*	*	n/a	11
53-6051	Transportation Inspectors	299	279	-20	-6.7	0	7	7	24.93	8
53-6099	Transportation Workers, Other	*	*	*	*	*	*	*	n/a	11
53-7000	Material Moving Workers	81,244	87,052	5,808	7.1	581	2,193	2,774	n/a	n/a
53-7011	Conveyor Operators and Tenders	*	*	*	*	*	*	*	12.43	11
53-7021	Crane and Tower Operators	1,065	1,238	173	16.2	17	23	40	16.21	10
53-7031	Dredge Operators	*	*	*	*	*	*	*	13.74	10
53-7032	Excavating & Loading Mach. & Dragline Operators	1,436	1,472	36	2.5	4	40	44	13.90	10
53-7033	Loading Machine Operators, Underground Mining	667	487	-180	-27.0	0	18	18	15.57	10
53-7041	Hoist and Winch Operators	131	150	19	14.5	2	4	6	14.37	10
53-7051	Industrial Truck and Tractor Operators	12,466	14,210	1,744	14.0	174	236	410	12.98	11
53-7061	Cleaners of Vehicles and Equipment	4,287	4,742	455	10.6	46	149	195	8.72	11
53-7062	Laborers & Freight, Stock & Material Movers, Hand	35,270	35,722	452	1.3	45	1,153	1,198	10.43	11
53-7063	Machine Feeders and Offbearers	5,227	5,460	233	4.5	23	143	166	11.12	11
53-7064	Packers and Packagers, Hand	15,546	18,423	2,877	18.5	288	291	579	8.93	11
53-7071	Gas Compressor & Gas Pumping Station Ops.	*	*	*	*	*	*	*	n/a	10
53-7072	Pump Operators, Except Wellhead Pumpers	*	*	*	*	*	*	*	n/a	10
53-7073	Wellhead Pumpers	*	*	*	*	*	*	*	10.14	10
53-7081	Refuse and Recyclable Material Collectors	1,586	1,794	208	13.1	21	41	62	10.64	11
53-7111	Shuttle Car Operators	828	508	-320	-38.6	0	21	21	15.97	11
53-7121	Tank Car, Truck, and Ship Loaders	339	317	-22	-6.5	0	9	9	14.89	10
53-7199	Material Moving Workers, Other	305	290	-15	-4.9	0	8	8	15.46	10

~ Education/Training Required Codes- Page 76

n/a - Not Available

\* Employment under 100 and unreliable data suppressed

Source: Kentucky Education Cabinet, Department for Workforce Investment, Office of Employment and Training, Research and Statistics Branch

Occupational Title	SOC Code	Page Number
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Accountants and Auditors	13-2011	29
Actors	27-2011	40
Actuaries	15-2011	30
Admin. Law Judges, Adjudicators, Hearing Officers	23-1021	36
Administrative Services Managers	11-3011	27
Adult Literacy, Remedial Ed. & GED Teachers	25-3011	38
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Advertising and Promotions Managers	11-2011	27
Advertising Sales Agents	41-3011	50
Aerospace Engineering & Operations Technicians	17-3021	32
Aerospace Engineers	17-2011	31
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Agricultural and Food Science Technicians	19-4011	34
Agricultural and Food Scientists	19-1010	33
Agricultural Engineers	17-2021	31
Agricultural Equipment Operators	45-2091	53
Agricultural Inspectors	45-2011	53
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Airfield Operations Specialists	53-2022	62
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Bus & Truck Mech. & Diesel Engine Specialists	49-3031	56
Bus Drivers, School	53-3022	62
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Cargo and Freight Agents	43-5011	52
Carpenters	47-2031	54
Carpet Installers	47-2041	54
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Cement Masons and Concrete Finishers	47-2051	54
Cementing & Gluing Machine Operators & Tenders	51-9191	61
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Chemical Engineers	17-2041	31
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Chemical Plant and System Operators	51-8091	60
Chemical Technicians	19-4031	34

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Civil Engineering Technicians	17-3022	32
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Claims Adjusters, Examiners, and Investigators	13-1031	29
Clean., Wash. & Metal Pickling Equip. Operators	51-9192	61
Cleaners of Vehicles and Equipment	53-7061	63
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Clinical, Counseling, and School Psychologists	19-3031	33
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Coin, Vending & Amusement Mach. Serv. & Repair.	49-9091	57
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Construction Trades Workers	47-2000	54
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Criminal Justice & Law Enforcement Teachers	25-1111	37
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Crush, Grind & Polish Mach. Setters, Operators	51-9021	61
Customer Service Representatives	43-4051	51
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Dental Assistants	31-9091	44
Dental Hygienists	29-2021	43
Dental Laboratory Technicians	51-9081	61
Dentists	29-1020	42
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Desktop Publishers	43-9031	52
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Drafters, Engineering, and Mapping Technicians	17-3000	32
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Electrical and Electronics Drafters	17-3012	32
Electrical Engineers	17-2071	31
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Electromechanical Equipment Assemblers	51-2023	58
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Electronics Engineers, Except Computer	17-2072	31
Elementary School Teachers, Ex. Special Ed.	25-2021	38
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Emergency Management Specialists	13-1061	29
Emergency Medical Technicians and Paramedics	29-2041	43
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Financial Managers	11-3031	27
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Managers, Protective Service Workers, Other	33-1099	45
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Market Research Analysts	19-3021	33
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Mechanical Engineering Technicians	17-3027	32
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Medical and Public Health Social Workers	21-1022	35

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Medical Appliance Technicians	51-9082	61
Medical Assistants	31-9092	44
Medical Equipment Preparers	31-9093	44
Medical Equipment Repairers	49-9062	57
Medical Records & Health Information Technicians	29-2071	43
Medical Scientists, Except Epidemiologists	19-1042	33
Medical Secretaries	43-6013	52
Medical Transcriptionists	31-9094	44
Meeting and Convention Planners	13-1121	29
Mental Health & Substance Abuse Social Workers	21-1023	35
Mental Health Counselors	21-1014	35
Merchandise Displayers and Window Trimmers	27-1026	40
Metal Workers and Plastic Workers	51-4000	58
Metal Workers and Plastic Workers, All Other	51-4199	59
Metal-Refining Furnace Operators and Tenders	51-4051	59
Meter Readers, Utilities	43-5041	52
Microbiologists	19-1022	33
Middle School Teachers, Ex. Special & Voc. Ed.	25-2022	38
Milling & Planing Machine Setters, Operators	51-4035	59
Millwrights	49-9044	57
Mine Cutting and Channeling Machine Operators	47-5042	55
Mining & Geological Engineers, Inc. Mining Safety	17-2151	31
Mining Machine Operators, All Other	47-5049	55
Misc. Counselors, Social, & Religious Workers	21-9000	35
Miscellaneous Legal & Related Workers	23-9000	36
Mixing & Blending Machine Setters, Operators	51-9023	61
Mobile Heavy Equip. Mechanics, Ex. Engines	49-3042	56
Model Makers, Metal and Plastic	51-4061	59
Model Makers, Wood	51-7031	60
Models	41-9012	50
Molders, Shapers & Casters, Ex. Metal and Plastic	51-9195	61
Molding, Coremaking, Casting Mach. Setters, Ops.	51-4072	59
Motion Picture Projectionists	39-3021	48
Motor Vehicle Operators	53-3000	62
Motor Vehicle Operators, Other	53-3099	62
Motorboat Mechanics	49-3051	56
Motorboat Operators	53-5022	62
Motorcycle Mechanics	49-3052	56
Multi-Media Artists and Animators	27-1014	40
Multiple Machine Tool Setters, Operators	51-4081	59

Occupational Title	SOC Code	Page Number
Music Directors and Composers	27-2041	40
Musical Instrument Repairers and Tuners	49-9063	57
Musicians and Singers	27-2042	40

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Natural Sciences Managers	11-9121	28
Network and Computer Systems Administrators	15-1071	30
Network Systems & Data Comm. Analysts	15-1081	30
New Accounts Clerks	43-4141	51
News Analysts, Reporters and Correspondents	27-3020	40
Nonfarm Animal Caretakers	39-2021	48
Nuclear Engineers	17-2161	31
Nuclear Medicine Technologists	29-2033	43
Numerical Tool & Process Control Programmers	51-4012	58
Nursing Aides, Orderlies, and Attendants	31-1012	44
Nursing Instructors and Teachers, Postsecondary	25-1072	37
Nursing, Psychiatric, and Home Health Aides	31-1000	44

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Obstetricians and Gynecologists	29-1064	42
Occupational & Physical Therapist Assist. & Aides	31-2000	44
Occupational Health & Safety Specialists & Techs.	29-9010	43
Occupational Therapist Aides	31-2012	44
Occupational Therapist Assistants	31-2011	44
Occupational Therapists	29-1122	42
Office Clerks, General	43-9061	52
Office Machine Operators, Except Computer	43-9071	52
Operating Engineers & Other Const. Equip. Ops.	47-2073	54
Operations Research Analysts	15-2031	30
Operations Specialties Managers	11-3000	27
Ophthalmic Laboratory Technicians	51-9083	61
Opticians, Dispensing	29-2081	43
Optometrists	29-1041	42
Order Clerks	43-4151	51
Orthotists and Prosthetists	29-2091	43
Other Construction and Related Workers	47-4000	55

Occupational Title	SOC Code	Page Number
Other Education, Training & Library Occupations	25-9000	39
Other Farming, Fishing, and Forestry Workers	45-9000	53
Other Food Prep. & Serving Related Workers	35-9000	46
Other Healthcare Practitioners & Technical Occs.	29-9000	43
Other Healthcare Support Occupations	31-9000	44
Other Install., Maint. & Repair Occupations	49-9000	57
Other Management Occupations	11-9000	27
Other Office and Administrative Support Workers	43-9000	52
Other Personal Care and Service Workers	39-9000	49
Other Production Occupations	51-9000	61
Other Protective Service Workers	33-9000	45
Other Sales and Related Workers	41-9000	50
Other Teachers and Instructors	25-3000	38
Other Transportation Workers	53-6000	63
Outdoor Power Equip. & Other Small Engine Mech.	49-3053	56

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Packaging & Filling Machine Operators & Tenders	51-9111	61
Packers and Packagers, Hand	53-7064	63
Painters, Construction and Maintenance	47-2141	54
Painters, Transportation Equipment	51-9122	61
Painting, Coating, and Decorating Workers	51-9123	61
Paper Goods Machine Setters, Operators	51-9196	61
Paperhangers	47-2142	54
Paralegals and Legal Assistants	23-2011	36
Parking Enforcement Workers	33-3041	45
Parking Lot Attendants	53-6021	63
Parts Salespersons	41-2022	50
Patternmakers, Metal and Plastic	51-4062	59
Patternmakers, Wood	51-7032	60
Paving, Surfacing & Tamping Equipment Operators	47-2071	54
Payroll and Timekeeping Clerks	43-3051	51
Pediatricians, General	29-1065	42
Personal and Home Care Aides	39-9021	49
Personal Appearance Workers	39-5000	48
Personal Care and Service Workers, Other	39-9099	49
Personal Financial Advisors	13-2052	29
Pest Control Workers	37-2021	47

Occupational Title	SOC Code	Page Number
Pesticide Handlers, Sprayers & Applicators, Veg.	37-3012	47
Petroleum Engineers	17-2171	31
Petroleum Pump System Ops., Refinery Ops.	51-8093	60
Pharmacists	29-1051	42
Pharmacy Aides	31-9095	44
Pharmacy Technicians	29-2052	43
Philosophy and Religion Teachers, Postsecondary	25-1126	38
Photographers	27-4021	41
Photographic Process Workers	51-9131	61
Photographic Processing Machine Operators	51-9132	61
Physical Scientists	19-2000	33
Physical Scientists, All Other	19-2099	33
Physical Therapist Aides	31-2022	44
Physical Therapist Assistants	31-2021	44
Physical Therapists	29-1123	42
Physician Assistants	29-1071	42
Physicians and Surgeons, All Other	29-1069	42
Physicists	19-2012	33
Physics Teachers, Postsecondary	25-1054	37
Pile-Driver Operators	47-2072	54
Pipelayers	47-2151	54
Plant and System Operators	51-8000	60
Plant and System Operators, All Other	51-8099	60
Plasterers and Stucco Masons	47-2161	54
Plating & Coating Mach. Setter, Operator & Tender	51-4193	59
Plumbers, Pipefitters, and Steamfitters	47-2152	54
Podiatrists	29-1081	42
Police and Sheriff's Patrol Officers	33-3051	45
Police, Fire, and Ambulance Dispatchers	43-5031	52
Political Science Teachers, Postsecondary	25-1065	37
Political Scientists	19-3094	33
Postal Service Clerks	43-5051	52
Postal Service Mail Carriers	43-5052	52
Postal Service Mail Sorters, Processors	43-5053	52
Postmasters and Mail Superintendents	11-9131	28
Postsecondary Teachers	25-1000	37
Postsecondary Teachers, All Other	25-1199	38
Pourers and Casters, Metal	51-4052	59
Power Distributors and Dispatchers	51-8012	60
Power Plant Operators	51-8013	60



Occupational Title	SOC Code	Page Number
Precision Instrument & Equip. Repairers, Other	49-9069	57
Prepress Technicians and Workers	51-5022	59
Preschool Teachers, Except Special Education	25-2011	38
Pressers, Textile, Garment, and Related Materials	51-6021	60
Primary, Secondary & Special Education Teachers	25-2000	38
Printing Machine Operators	51-5023	59
Printing Workers	51-5000	59
Printing Workers, Other	51-5099	59
Private Detectives and Investigators	33-9021	45
Probation Officers & Correctional Treatment Spec.	21-1092	35
Procurement Clerks	43-3061	51
Producers and Directors	27-2012	40
Production Workers, Other	51-9199	61
Production, Planning, and Expediting Clerks	43-5061	52
Proofreaders and Copy Markers	43-9081	52
Property, Real Estate, Community Ass'n Managers	11-9141	28
Protective Service Workers, All Other	33-9099	45
Psychiatric Aides	31-1013	44
Psychiatric Technicians	29-2053	43
Psychiatrists	29-1066	42
Psychology Teachers, Postsecondary	25-1066	37
Public Relations Managers	11-2031	27
Public Relations Specialists	27-3031	40
Pump Operators, Except Wellhead Pumpers	53-7072	63
Purchasing Agents and Buyers, Farm Products	13-1021	29
Purchasing Agents, Ex. Wholesale, Retail & Farm	13-1023	29
Purchasing Managers	11-3061	27

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Radiation Therapists	29-1124	42
Radio Mechanics	49-2021	56
Radiologic Technologists and Technicians	29-2034	43
Rail Car Repairers	49-3043	56
Rail Transportation Workers	53-4000	62
Rail Transportation Workers, Other	53-4099	62
Rail Yard Engineers, Dinkey Operators & Hostlers	53-4013	62
Railroad Brake, Signal, and Switch Operators	53-4021	62
Railroad Conductors and Yardmasters	53-4031	62

Occupational Title	SOC Code	Page Number
Rail-Track Laying & Maintenance Equip. Operators	47-4061	55
Real Estate Brokers	41-9021	50
Real Estate Sales Agents	41-9022	50
Receptionists and Information Clerks	43-4171	51
Recreation & Fitness Studies Teachers, Postsec.	25-1193	38
Recreation Workers	39-9032	49
Recreational Therapists	29-1125	42
Recreational Vehicle Service Technicians	49-3092	56
Refractory Materials Repairers, Ex. Brickmasons	49-9045	57
Refuse and Recyclable Material Collectors	53-7081	63
Registered Nurses	29-1111	42
Rehabilitation Counselors	21-1015	35
Reinforcing Iron and Rebar Workers	47-2171	54
Religious Workers	21-2000	35
Reservation, Transp. Ticket Agents & Travel Clerks	43-4181	51
Residential Advisors	39-9041	49
Respiratory Therapists	29-1126	42
Respiratory Therapy Technicians	29-2054	43
Retail Sales Workers	41-2000	50
Retail Salespersons	41-2031	50
Riggers	49-9096	57
Rock Splitters, Quarry	47-5051	55
Rolling Machine Setters, Operators & Tenders	51-4023	58
Roof Bolters, Mining	47-5061	55
Roofers	47-2181	54
Rotary Drill Operators, Oil and Gas	47-5012	55
Roustabouts, Oil and Gas	47-5071	55

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Sailors and Marine Oilers	53-5011	62
Sales and Related Workers, All Other	41-9099	50
Sales Engineers	41-9031	50
Sales Managers	11-2022	27
Sales Representatives, Services	41-3000	50
Sales Reps., Wholesale & Manuf., Ex. Tech. & Sci.	41-4012	50
Sales Reps., Wholesale & Manuf., Technical & Sci.	41-4011	50
Sales Reps., Wholesale and Manufacturing	41-4000	50
Sawing Mach. Setters, Operators & Tenders, Wood	51-7041	60

Occupational Title	SOC Code	Page Number
Secondary School Teachers, Ex. Special & Voc. Ed.	25-2031	38
Secretaries and Administrative Assistants	43-6000	52
Secretaries, Admin. Assist. & Other Office Support	43-9999	52
Secretaries, Except Legal, Medical, and Executive	43-6014	52
Securities, Commodities & Financial Serv. Sales	41-3031	50
Security and Fire Alarm Systems Installers	49-2098	56
Security Guards	33-9032	45
Segmental Pavers	47-4091	55
Self-Enrichment Education Teachers	25-3021	38
Semiconductor Processors	51-9141	61
Separate, Filter, Clarify, Precipitate, Still Mach. Set.	51-9012	61
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	55
Service Station Attendants	53-6031	63
Service Unit Operators, Oil, Gas, and Mining	47-5013	55
Set and Exhibit Designers	27-1027	40
Sewers, Hand	51-6051	60
Sewing Machine Operators	51-6031	60
Shampooers	39-5093	48
Sheet Metal Workers	47-2211	54
Ship Engineers	53-5031	62
Shipping, Receiving, and Traffic Clerks	43-5071	52
Shoe and Leather Workers and Repairers	51-6041	60
Shoe Machine Operators and Tenders	51-6042	60
Shuttle Car Operators	53-7111	63
Signal and Track Switch Repairers	49-9097	57
Skin Care Specialists	39-5094	48
Slaughterers and Meat Packers	51-3023	58
Social and Community Service Managers	11-9151	28
Social and Human Service Assistants	21-1093	35
Social Scientists and Related Workers	19-3000	33
Social Scientists and Related Workers, Other	19-3099	33
Social Work Teachers, Postsecondary	25-1113	37
Sociology Teachers, Postsecondary	25-1067	37
Sound Engineering Technicians	27-4014	41
Special Ed. Teachers, Presch., Kindergarten, Elem.	25-2041	38
Special Education Teachers, Middle School	25-2042	38
Special Education Teachers, Secondary School	25-2043	38
Speech-Language Pathologists	29-1127	42
Stationary Engineers and Boiler Operators	51-8021	60
Statistical Assistants	43-9111	52

Occupational Title	SOC Code	Page Number
Statisticians	15-2041	30
Stock Clerks and Order Fillers	43-5081	52
Stonemasons	47-2022	54
Structural Iron and Steel Workers	47-2221	54
Structural Metal Fabricators and Fitters	51-2041	58
Substance Abuse & Behavioral Disorder Couns.	21-1011	35
Supervisors of Installation, Maint., Repair Workers	49-1000	56
Supervisors, Building & Grounds Cleaning	37-1000	47
Supervisors, Construction and Extraction Workers	47-1000	54
Supervisors, Farming, Fishing & Forestry Workers	45-1000	53
Supervisors, Food Preparation & Serving Workers	35-1000	46
Supervisors, Office & Admin. Support Workers	43-1000	51
Supervisors, Personal Care and Service Workers	39-1000	48
Supervisors, Production Workers	51-1000	58
Supervisors, Sales Workers	41-1000	50
Supervisors, Transp. & Material Moving Workers	53-1000	62
Surgeons	29-1067	42
Surgical Technologists	29-2055	43
Survey Researchers	19-3022	33
Surveying and Mapping Technicians	17-3031	32
Surveyors	17-1022	31
Switchboard Operators, Inc. Answering Service	43-2011	51

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Tailors, Dressmakers, and Custom Sewers	51-6052	60
Tank Car, Truck, and Ship Loaders	53-7121	63
Tapers	47-2082	54
Tax Examiners, Collectors, and Revenue Agents	13-2081	29
Tax Preparers	13-2082	29
Taxi Drivers and Chauffeurs	53-3041	62
Teacher Assistants	25-9041	39
Teachers, Primary, Secondary & Adult, Other	25-3999	38
Team Assemblers	51-2092	58
Technical Writers	27-3042	40
Telecommunications Equip. Install. & Repair.	49-2022	56
Telecommunications Line Installers and Repairers	49-9052	57
Telemarketers	41-9041	50
Telephone Operators	43-2021	51



Occupational Title	SOC Code	Page Number
Tellers	43-3071	51
Terrazzo Workers and Finishers	47-2053	54
Textile Bleaching & Dyeing Machine Operators	51-6061	60
Textile Cutting Machine Setters, Operators	51-6062	60
Textile Knitting & Weaving Mach. Setters, Operators	51-6063	60
Textile Winding, Twist., Drawing Out Mach. Setters	51-6064	60
Textile, Apparel, and Furnishings Workers	51-6000	60
Textile, Apparel, and Furnishings Workers, Other	51-6099	60
Tile and Marble Setters	47-2044	54
Timing Device Assemb., Adjusters & Calibrators	51-2093	58
Tire Builders	51-9197	61
Tire Repairers and Changers	49-3093	56
Title Examiners, Abstractors, and Searchers	23-2093	36
Tool and Die Makers	51-4111	59
Tool Grinders, Filers, and Sharpeners	51-4194	59
Top Executives	11-1000	27
Tour Guides and Escorts	39-6021	48
Traffic Technicians	53-6041	63
Training and Development Specialists	13-1073	29
Transit and Railroad Police	33-3052	45
Transp. Attend., Ex. Flight Attend., Baggage Porters	39-6032	48
Transportation Inspectors	53-6051	63
Transportation Workers, Other	53-6099	63
Transportation, Storage & Distribution Managers	11-3071	27
Transportation, Tourism, and Lodging Attendants	39-6000	48
Travel Agents	41-3041	50
Travel Guides	39-6022	48
Tree Trimmers and Pruners	37-3013	47
Truck Drivers, Heavy and Tractor-Trailer	53-3032	62
Truck Drivers, Light or Delivery Services	53-3033	62

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Umpires, Referees, and Other Sports Officials	27-2023	40
Upholsterers	51-6093	60
Urban and Regional Planners	19-3051	33
Ushers, Lobby Attendants, and Ticket Takers	39-3031	48

Occupational Title	SOC Code	Page Number
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Vehicle & Mobile Equip. Mech., Install/Repair, Other	49-3099	56
Vehicle & Mobile Equipment Mechanics, Installers	49-3000	56
Veterinarians	29-1131	42
Veterinary Assist. & Laboratory Animal Caretakers	31-9096	44
Veterinary Technologists and Technicians	29-2056	43
Vocational Education Teachers, Middle School	25-2023	38
Vocational Education Teachers, Postsecondary	25-1194	38
Vocational Education Teachers, Secondary School	25-2032	38

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Waiters and Waitresses	35-3031	46
Watch Repairers	49-9064	57
Water & Liquid Waste Treat. Plant & System Ops.	51-8031	60
Water Transportation Workers	53-5000	62
Weigher, Measurer, Checker & Sampler, Records	43-5111	52
Welders, Cutters, Solderers, and Brazers	51-4121	59
Welding, Soldering & Brazing Mach. Setters, Ops.	51-4122	59
Wellhead Pumpers	53-7073	63
Wholesale and Retail Buyers, Ex. Farm Products	13-1022	29
Woodworkers	51-7000	60
Woodworkers, All Other	51-7099	60
Woodworking Mach. Setters, Operators & Tenders	51-7042	60
Word Processors and Typists	43-9022	52
Writers and Authors	27-3043	40

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Zoologists and Wildlife Biologists	19-1023	33
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## Educational Classifications

Occupations are classified into one of 11 categories listed according to these principles:

- An occupation is placed into the category that best describes the education or training needed by most workers to become fully qualified.
- Postsecondary awards, if generally needed for entry into the occupation, take precedence over work-related training even though additional skills or experience may be needed for a worker to become fully qualified.
- The length of time an average worker generally needs to become fully qualified through a combination of on-the-job training and experience is used to categorize occupations in which a post secondary award generally is needed for entry.

### Postsecodary awards

**(1) *First professional degree.*** Completion of the degree usually requires at least three years of full-time academic study beyond a bachelor's degree.

**(2) *Doctoral degree.*** Completion of a Ph.D. or other doctoral degree usually requires at least three years of full-time academic study beyond a bachelor's degree.

**(3) *Master's degree.*** Completion of the degree usually requires one or two years of full time academic study beyond a bachelor's degree.

**(4) *Bachelor's or higher degree, plus work experience.*** Most occupations in this category are management occupations. All require experience in a related non-management position for which a bachelor's or higher degree is usually required.

**(5) *Bachelor's degree.*** Completion of the degree generally requires at least four years, but not more than five years, of full-time academic study.

**(6) *Associate's degree.*** Completion of the degree usually requires at least two years of full-time academic study.

**(7) *Postsecondary vocational awards.*** Some programs last only a few weeks while others may last more than a year. Programs lead to a certificate or other award, but not a degree.

### Work-related training

**(8) *Work experience in a related occupation.*** Many occupations requiring work experience are first-line supervisors/managers of service, sales and related, production, or other occupations, or are management occupations.

**(9) *Long-term on-the-job training.*** More than 12 months on on-the-job training or combined work experience and formal classroom instruction are needed for workers to develop the skills necessary to be fully qualified. This category includes formal and informal apprenticeships that may last up to five years. Long-term on-the-job training also includes intensive occupation-specific, employer-sponsored programs that workers must successfully complete. These include fire and police academies and schools for air traffic controllers and flight attendants. In other occupations - insurance sales and securities sales, for example - trainees take formal courses, often provided on the job site, to prepare for the required licensing exams. Individuals undergoing training generally are considered to be employed in the occupation. Also included in this category is the development of a natural ability - such as that possessed by musicians, athletes, actors, and other entertainers - that must be cultivated over several years, frequently in a nonwork setting.

**(10) *Moderate-term on-the-job training.*** Skills needed to be fully qualified can be acquired during one to twelve months of combined on-the-job experience and informal training.

**(11) *Short-term on-the-job training.*** Skills needed to be fully qualified can be acquired during a short demonstration of job duties or during one month or less of on-the-job experience or instruction.